



Hood Canal Bridge Retrofit and East-half Replacement Project



Table of Contents

Project Director's letter	2
Monthly & Quarterly Reports	
February	3
March	7
April	11
May	15
June	19
Second Quarter	23
July	31
August	35
Third Quarter	39
October	47
November	51
Fourth Quarter	55



These compiled reports highlight Hood Canal Bridge Project information from **January 1 – December 31, 2005.**

For more information about the Hood Canal Bridge Project visit the project web site, **www.hoodcanalbridge.com**, or contact project staff:

Becky Hixson, *Communication Manager*,
(253) 305-6450, hixsonb@wsdot.wa.gov

Eric Soderquist, *Project Director*,
soderqe@wsdot.wa.gov



January 2006

Hood Canal Bridge Project 2005 – Year in Review

This compilation of 2005 monthly and quarterly reports was prepared for your reference and resource. It serves as a log of 2005 events on the project and highlights progress the Hood Canal Bridge Team made over the past twelve months. In the last year staff focused on finding a location to build pontoons and anchors for the project, on negotiating contract changes and on building a strong delivery team.

On December 21, 2004, after spending months working to define the extent of archeological resources that were inadvertently discovered at the Tze-whit-sen site during construction of a pontoon construction facility in Port Angeles, the Washington State Department of Transportation (WSDOT) announced that it was stopping all work on the graving dock that would have been used for fabricating new pontoons for the Hood Canal Bridge. Doug MacDonald, WSDOT Secretary of Transportation, noted, "We do not come to this conclusion lightly. Despite the mutual good faith efforts of both WSDOT and the Lower Elwha Klallam Tribe to develop an acceptable place to allow the work to continue at the Port Angeles site, we have jointly determined that it is not possible."

As work to resolve the archeological issues in Port Angeles continued, WSDOT was suddenly faced with the challenge of finding a new location for building pontoons and anchors. The foremost question for WSDOT executives was, "What is the best public investment option for getting the project back under construction and completed as soon as possible?" To answer that question for the Hood Canal Bridge project, all efforts focused on addressing the following issues:

- Should WSDOT continue with contract work that is not affected by the Port Angeles decision?
- Where should pontoons and anchors be built?
- Could a reasonable settlement be quickly negotiated with the current contractor to resolve all past issues and re-price building bridge parts at a different location?
- How would the go-forward work be best administered?

At the end of 2005, WSDOT has found answers to these key questions and is quickly aligning resources to build quality pontoons. The revamped Kiewit-General/WSDOT Hood Canal Bridge Team brings to the project a renewed sense of enthusiasm, a focus on "Project First," and a willingness to be accountable. Their objectives are "Energy, Focus, Credibility" and they are dedicated to managing and leading this effort to success.

If you would like more information about the project, please visit our website at www.hoodcanalbridge.com, or contact the Hood Canal Bridge Team directly at (253) 305-6400.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Eric G. Soderquist', is positioned above the printed name.

Eric G. Soderquist, P.E.
Project Director
Hood Canal Bridge Team

WSDOT Hood Canal Bridge Project
(253) 305-6400
www.hoodcanalbridge.com
950 Broadway, Suite 501
Tacoma, WA 98402



East-half approach to Hood Canal Bridge.

Hood Canal Bridge Retrofit and East-half Replacement Project

WEST-HALF RETROFIT COMPLETION: 2005

EAST-HALF REPLACEMENT COMPLETION GOAL: 2008

February 2005

Project Schedule Summary

FEBRUARY IN REVIEW

Bridge Site

- Shaft 1N installation completed
- West approach access completed
- Concrete column placement completed on Pier 6 and Pier 8
- Anchor cable replacement advertised to bidders

Graving Dock Site

- Site Selection report completed (see back page for details)

Short-term Goals

- Pursued Phase 1 project delivery plan
- Refined new business structure
- Addressed key policy issues concerning Port Angeles graving dock
- Prepared for negotiations with contractor

Public Information

- Supported announcement of the pontoon construction site selection process
- Ongoing web page updates and published electronic newsletter
- Coordinated ongoing outreach with local community regarding 2005 three-day closures
- Negotiated marketing scope with Demich Group to support three-day closure outreach

NEXT STEPS

Bridge Site

- Start west-half deck widening on the north side of the bridge on March 15
- Complete concrete crossbeam placement on Pier 7 and Pier 9
- Complete Pier 1 and Pier 10 excavation and preparatory work for crossbeam placement
- Complete east-half approach span scaffolding construction

Graving Dock Site

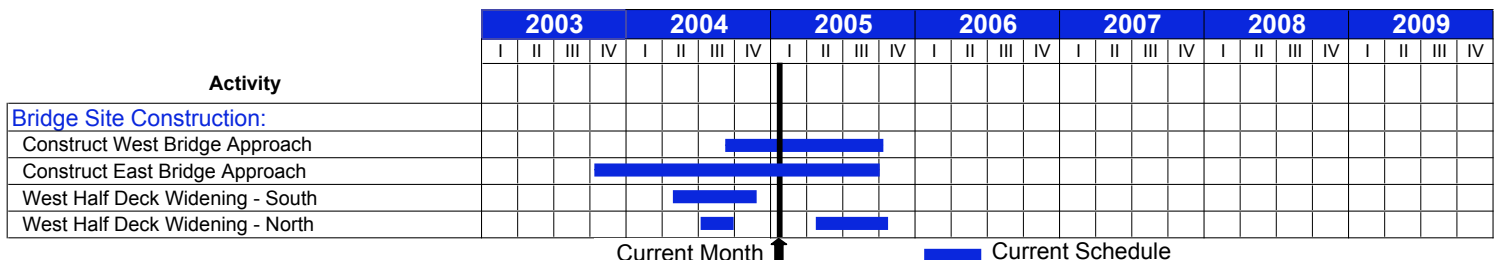
- Due diligence for three preferred sites listed in Site Selection report (see back page for details)
- Establish design teams

Short-term Goals

- Re-start design work by March 15
- Negotiate contract changes with Kiewit-General
- Develop new contract documents
- Update finance, reporting and delivery plans

Public Information

- Mats Mats Bay community outreach — first meeting scheduled for March 16
- Update draft communications plan by end of March
- Add photo gallery to web site by April
- Start three-day closure outreach planning efforts in March



Approach Span Progress

East Approach

- All pier columns on the east approach are complete.
- Pier 6 and Pier 8 crossbeams were poured.
- Pier 10 excavation in preparation for crossbeam placement is in progress.
- Began scaffolding erection for construction of the new bridge approach structure.
- Erosion control and spill prevention.

West Approach

- Installation of drilled shafts for Pier 1 and Pier 2 continued.
- Excavation for Pier 1 crossbeam is in progress.
- Concrete was poured for the bases of Shafts 1S, 3N, and 3S.
- Drilled hole and placed reinforced steel for Shaft 1N.

Environmental Progress

February marked the beginning of the fish closure window on the west side of the canal. In-water work will resume in mid-July.

Battelle Environmental installed four light sensors on February 17; two were placed underneath the southeast work trestle and two underneath the northeast work trestle. Biologists will use the data gathered over six weeks to determine if the light levels under the trestles are high enough to facilitate fish movement and eelgrass growth.



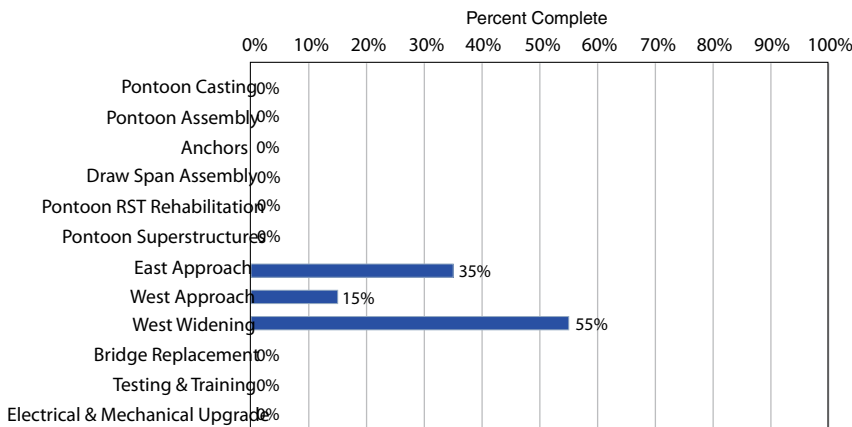
Working on Pier 6 crossbeam.



Pouring Pier 8 crossbeam.

Project Site Completion Status

Bridge Site Activity



Source: WSDOT Hood Canal Bridge office

FINANCIAL PICTURE

Project Cost Summary

Expenditures as of February 2005 (in millions)

Project Cost Summary	Budgeted	Expended
Preliminary Engineering	\$ 12.4	\$ 12.1
Right-of-Way	7.7	6.8
Construction	285.0	122.2
Total	\$295.1	\$141.1

Fabrication

A big part of the project is fabrication of the transition span sections. This work is done in Mississippi and Texas by fabricators who have experience building the special steel tubes needed.

Assembly

Once completed, the transition span sections will be moved by rail to Vancouver, Washington. Another fabricator will assemble them to their finished size of 280' long by 67'9" wide by 35' tall. The finished transition spans will be barged to the bridge site once the pontoon work is completed.



Existing transition span.



Proposed transition span.

THREE-DAY CLOSURES

Two three-day closures are required to move new east-half and west-half bridge approaches in place. Based on the contractor's latest schedule update, the closures would be Aug. 5-9 and 26-30. As this event is still six months away, these dates are subject to change. The contractor is required to provide notice six weeks prior to bridge closure. A communications plan is underway to help the community prepare for this event.

COMMUNICATIONS PLAN

Key Messages

- Travelers can still get to the peninsula easily.
- Major progress milestone has been achieved.
- Innovative technology allows for short closures.
- Opportunity to become better ready for 8-week closure.

Spring

- March:** Information to tourism trade publications. Letters to community groups. Establish community partnerships.
- April:** Design community outreach video and presentation materials. Set community outreach schedule.
- May:** Design print materials to go to community. Road signage plan.

June

- Week 1:** Expand closure information on the web site.
- Week 2:** Collect information on paid advertising options.
- Week 3:** Finalize media strategies. Submit feature stories to media.
- Week 4:** Distribute media announcement to local and regional news media.

July

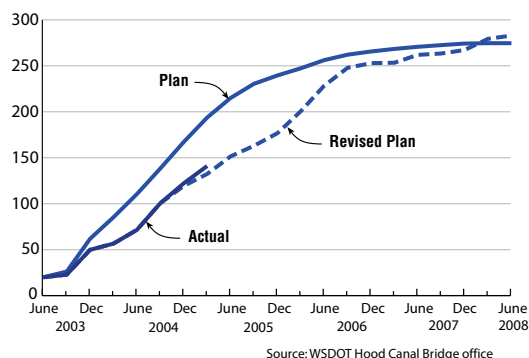
- Week 1:** Host a media tour and photo opportunity of the construction site.
- Week 2:** Distribute media announcement to local and regional news media.
- Week 3:** Submit feature stories to media.
- Week 4:** Continue community relations.

August

- Week 1:** First closure. Set up media stations at the end of the bridge.
- Week 2:** Evaluate closure. Continue media and community relations.
- Week 3:** Continue media and community relations.
- Week 4:** Second closure. Set up media stations at the end of the bridge.

Project Cash Flow

Planned vs. Actual Expenditures (Total Project Cost)
Dollars in Millions



February 2005

Site Selection

In August 2003, the Washington State Department of Transportation (WSDOT) began building a steel and concrete facility near Port Angeles for casting concrete pontoons and concrete anchors. Once the pontoons and anchors were built they would be towed from the Port Angeles facility to the Hood Canal Bridge, where they would be installed to replace the existing 1961 era pontoons that make up the east portion of the bridge.

When crews began grading the site, they discovered human remains and cultural artifacts of the Lower Elwha Klallam Tribe and its ancestors. The discoveries led WSDOT, the Lower Elwha Klallam Tribe, and other state and federal agencies to undertake an extensive archaeological recovery effort at the site. As the recovery effort continued, many more archaeological discoveries were made. As a result, the Tribe asked WSDOT to leave the site on December 10, 2004. On December 21, 2004, WSDOT announced its intention to pursue construction elsewhere.

On December 22, 2004, WSDOT requested proposals for commercial waterfront property available for lease or purchase within Puget Sound. In the solicitation, WSDOT identified the preferred site size, design requirements, launching methods, and the site evaluation criteria.

WSDOT received 18 proposals. The sites are located within Puget Sound and Grays Harbor County as shown on the potential sites map (opposite page). The proposals were reviewed and supporting technical data were obtained by a WSDOT team made up of bridge engineers, geologists, environmental engineers, biologists and consultants. The WSDOT team visited the properties and in some instances requested additional information from submitters.

Based on WSDOT's engineering and environmental evaluation of the sites, WSDOT has identified three preferred sites for pontoon and anchor construction. The preferred sites include the Port of Everett South Terminal, Port Ludlow Quarry, and properties presented by the FCB Facilities Team. Over the next several months, these sites will be evaluated further during the process of due diligence.

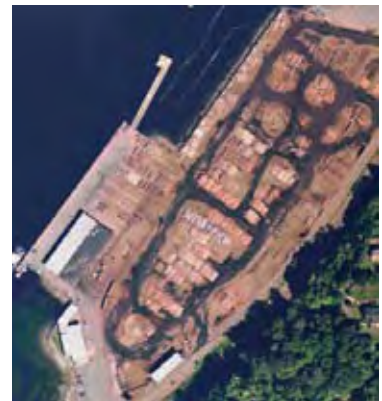
Photos are available in the Site Selection Report PDF online at www.hoodcanalbridge.com.



Concrete Technologies – One of the FCB Facilities Team partners.



Port Ludlow Quarry, Mats Mats Bay, Jefferson County



Port of Everett, South Terminal
Snohomish County.

This report highlight updated information regarding the Hood Canal Bridge Project. Additional information may be obtained from WSDOT's Olympic Region Communications Office at (360) 357-2789.

For more information about the Hood Canal Bridge Project, visit the HCB web site: www.hoodcanalbridge.com

For more information, contact:

Lloyd D. Brown, Media Relations
(360) 357-2789 • brownl@wsdot.wa.gov

Eric Soderquist, Project Director
(360) 704-6310 • soderqe@wsdot.wa.gov

Becky Hixson, Community Outreach
(360) 704-6308 • hixsonb@wsdot.wa.gov



Hood Canal Bridge Retrofit and East Half Replacement Project

WEST-HALF RETROFIT COMPLETION: 2005

EAST-HALF REPLACEMENT COMPLETION GOAL: 2008

March 2005

Building A Bridge: Community Partnerships

Hood Canal Bridge and Olympic Region staff met with Port Townsend and Port Angeles Chamber leaders on March 22, 2005, to discuss the upcoming three-day closures of the Hood Canal Bridge. Concern was voiced over the contractor's proposed closure dates because of the potential negative impact the closures could have on the Olympic Peninsula's tourism industry. It became clear that the closure dates should be reevaluated.

WSDOT, in partnership with the Chambers, will conduct a community outreach effort in the month of April to determine which closure dates will have the least impact on Olympic Peninsula residents and visitors. This process will include:

Community Involvement: Project staff members will work with the tourism industry, business interests, community groups, local transportation agencies, and the Peninsula Regional Transportation Planning Organization (members include a broad cross-section of community leaders and interests who are focused on transportation issues on the peninsula) to receive feedback on the closures from each of their constituent groups.

Three-day Closure Questionnaire: A questionnaire will be distributed through the public meetings, community partners and on the project website.

Newspaper Ads: Placed in *Peninsula Daily News*, *Port Townsend Leader* and *Sequim Gazette* featuring the questionnaire and publicizing open house dates.

Open Houses: Two open houses about the three-day closures were scheduled for Monday, April 18, at the Port Angeles City Hall and Tuesday, April 19, at the Fort Worden Commons in Port Townsend.

Telephone Survey: A random 400-person telephone survey of Olympic Peninsula residents will be conducted.

The Results

WSDOT will collect and evaluate feedback and make a decision regarding preferred closure dates by May 10, 2005. If the decision is made to change the closure dates, negotiations will then begin with the contractor. Based on the contractor's latest schedule update, the Kitsap County side would close starting at 8 p.m. Friday, Aug. 5 and reopen at 5 a.m. Tuesday, Aug. 9. The Jefferson County side would close starting at 8 p.m. Friday, Aug. 26 and re-open at 5 a.m. Tuesday, Aug. 30.

Work at the Bridge



Longitudinal stops were poured for Piers 7 and 9. Once the new approach span is rolled into place, the longitudinal stops keep the bridge from shifting to the east or to the west. These stops are unique to this project because of the technology required to complete the rollover process.



Crossbeams were completed for Piers 7, 9 and 10 for the east-half approach span. Excavation began for Pier 1 crossbeam for the west-half approach span.



The silhouette of the bridge is changing as the new columns and crossbeams for the east-half approach spans near completion.



Roll-on falsework for the new roadway deck was delivered and assembled. This falsework will hold the new approach span as it is constructed.



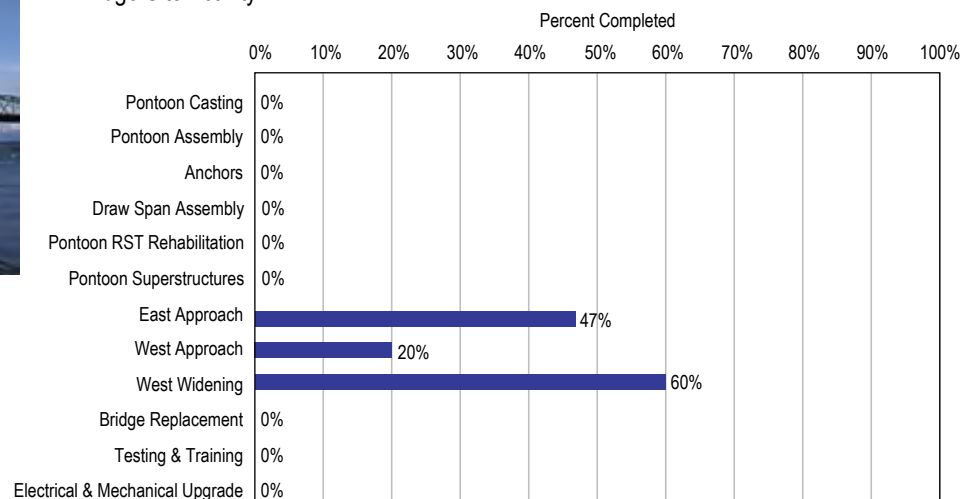
Installation of the formwork for Pier 4 crossbeam was completed.



Temporary barrier installation and restriping were completed in preparation for west-half roadway widening work. Existing street lights were removed from the north side of the roadway. North side demolition work began.

Project Site Completion Status

Bridge Site Activity



Source: WSDOT Hood Canal Bridge office

Major Work Items

Anchor Cable Replacement

WSDOT opened bids to replace 16 of the 18 Hood Canal Bridge east-half anchor cables. These cables keep the bridge from floating out of alignment by securing the bridge to the underwater anchors. Two bids were received. The lowest bidder will be awarded the nearly \$3.4 million contract in April. The cables were scheduled to be replaced during the current bridge replacement and retrofit project, but delays in pontoon construction caused WSDOT officials to issue a separate contract for the work.

Pontoon Construction

WSDOT started the design process for all three preferred sites - Mats Mats Bay north of Port Hadlock, Port of Everett South Terminal, and a combination of existing Puget Sound dry dock facilities proposed by FCB Facilities Team. This process includes meeting due diligence requirements, scoping the sites by conducting surveys and reviewing photos and researching environmental regulations.

Engineers will create preliminary designs based on the site type, size and location information collected.

Concurrently, WSDOT began public outreach efforts with Mats Mats community members and responded to constituents' questions.

Any consideration of other sites will be suspended until the design phase of work can be completed for the three preferred sites.

Anchor Construction

Four options for anchor construction have been prepared for consideration: Two at Port Angeles, one at the bridge site and one at Port Gamble. WSDOT is currently evaluating the cost advantages, timelines, transport times, and environmental permitting associated with each of the alternatives.

The End Result

The Hood Canal Bridge will have a new wider east-half floating section, new approach sections and transition trusses on the east and west ends when construction is completed. In addition, the west half will be widened to allow for continuous eight-foot shoulders across the entire length of the bridge — matching the new east half.

Financial Picture

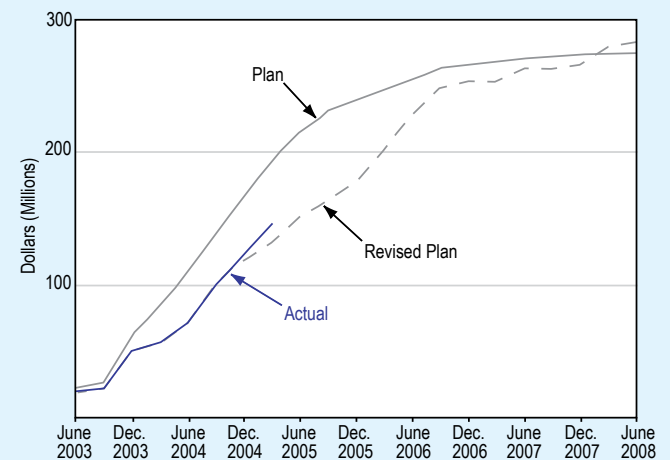
Project Cost Summary

Expenditures as of March 2005 (in millions)

Project Cost Summary	Budgeted	Expended
Preliminary Engineering	\$ 12.4	\$ 12.1
Right-of-Way	7.7	6.9
Construction	271.9	127.1
Total	\$292.0	\$146.1

Planned vs. Actual Expenditures

(Total Project Cost)



Source: WSDOT Hood Canal Bridge office

March 2005



Looking Ahead – April 2005

Bridge Site

West-half approach span work:

- Complete Pier 1 crossbeam

West-half roadway widening:

- Remove existing concrete barrier
- Demolish overhang

East-half approach span work:

- Complete roll-on falsework tower erection
- Install rolling plates
- Erect girders
- Begin forming intermediate diaphragms

Anchor Cable Replacement

- Award contract to low bidder

Graving Dock Site

- Select site
- Negotiate contract changes with Kiewit-General

Public Information

- Complete public meetings in Port Angeles and Port Townsend
- Complete telephone survey
- Collect all three-day closure preferred date questionnaires

Bridge Facts

Bridge length:

1.5 miles

Original bridge:

Opened Aug. 12, 1961

West half sunk:

Feb. 13, 1979

West half replaced:

October 1982

Center draw-span opening:

600 feet

Water depth below the bridge:

80 to 340 feet

Tidal swings up to:

16.5 feet

This report highlights updated information regarding the Hood Canal Bridge Project. Additional information may be obtained from WSDOT's Olympic Region Communications Office at (360) 357-2789.

For more information, contact:

Lloyd D. Brown, Media Relations
(360) 357-2789 • brownl@wsdot.wa.gov

Eric Soderquist, Project Director
(360) 704-6310 • soderqe@wsdot.wa.gov

Becky Hixson, Community Outreach
(360) 704-6308 • hixsonb@wsdot.wa.gov

For more information about the Hood Canal Bridge Project, visit the HCB web site: www.hoodcanalbridge.com



(L to R) Nighttime girder placement on temporary falsework for new east approach span. West approach span column construction. Demolition of existing north side west-half bridge deck.

Hood Canal Bridge Retrofit and East Half Replacement Project

WEST-HALF WIDENING COMPLETION: 2005

EAST-HALF REPLACEMENT COMPLETION GOAL: 2009

April 2005



Delivery of Hilman rollers, April 2005

Roll On ... and Off

The Hilman Rollers are the magic behind moving the new east and west approach spans for the Hood Canal Bridge. These rollers are high capacity, low friction, low profile and easy to control. In a few short days, they will slowly move millions of pounds of concrete and steel.

The rollers operate based on the principle of the recirculating chain — like a chain on a bicycle. This chain is constructed with a series of connected cylinders that recirculate around a central plate. The weight of the approach spans rests on the frame as the rollers slowly move around and around, inching the approach spans into place.



Installation of Hilman roller on new east approach span

Source: www.hilmanrollers.com

Hilman Rollers are amazingly adaptable. They are equally functional right-side-up, upside-down, or vertically. Since 1953, they have been used in numerous industries, including oil and gas exploration, bridge building, heavy construction, ship building, research equipment, structural moving, power generation and manufactured housing.

Bridge Facts

- The new west approach span is 190 feet long and weighs 2.2 million pounds (1,110 tons).
- Only four 300-ton rollers are required to move the new west approach span into place.
- Eight 500-ton rollers and four 300-ton rollers are needed to roll the 7.6 million pound (3,810 ton) east approach span.
- Moving the 640-foot east approach span will be the equivalent in weight to moving more than 100 gray whales or 500 male African elephants.

Work at the Bridge

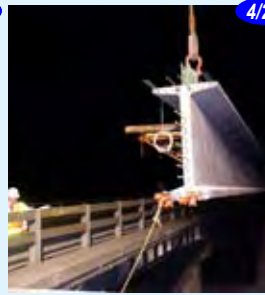
East Approach



Started rebar placement for crossbeam at Pier 4



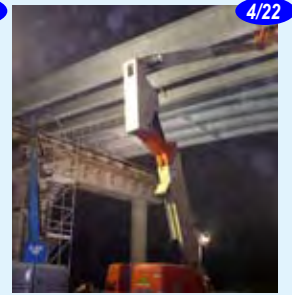
Completed Crossbeam 5



Set girders Span 9



Set girders Span 8



Set girders Span 7



Completed endwall at Pier 10



Completed intermediate diaphragms in span 9



Roll-off falsework delivered to site



All roll-on falsework towers erected except Pier 5

West-half Roadway Widening



Cut and removed all existing traffic barrier



Demolished the overhang on the north side



West-half roadway widening

West Approach



Completed excavation for Pier 1 crossbeam



Placed 95 percent of the reinforcing bars for Pier 1 crossbeam.



Began forming Pier 1 crossbeam

Financial Picture

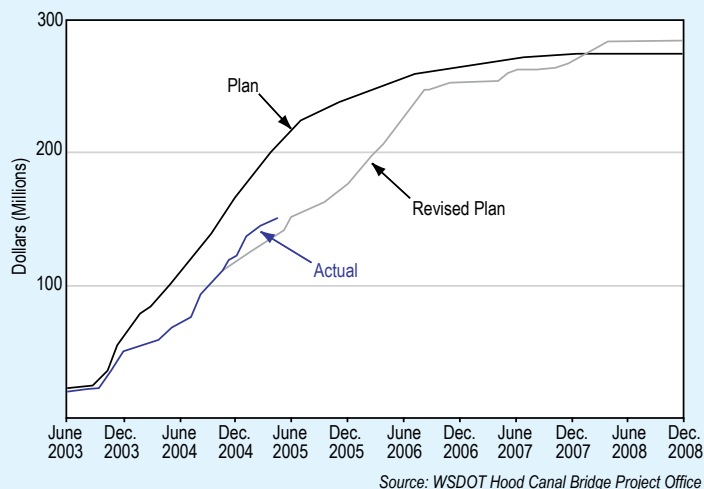
Project Cost Summary

Expenditures as of March 2005 (in millions)

Project Cost Summary	Budgeted	Expended
Preliminary Engineering	\$ 12.4	\$ 12.2
Right-of-Way	7.7	6.9
Construction	271.9	130.5
Total	\$292.0	\$149.6

Planned vs. Actual Expenditures

(Total Project Cost)



Three-day Closures – Public Outreach

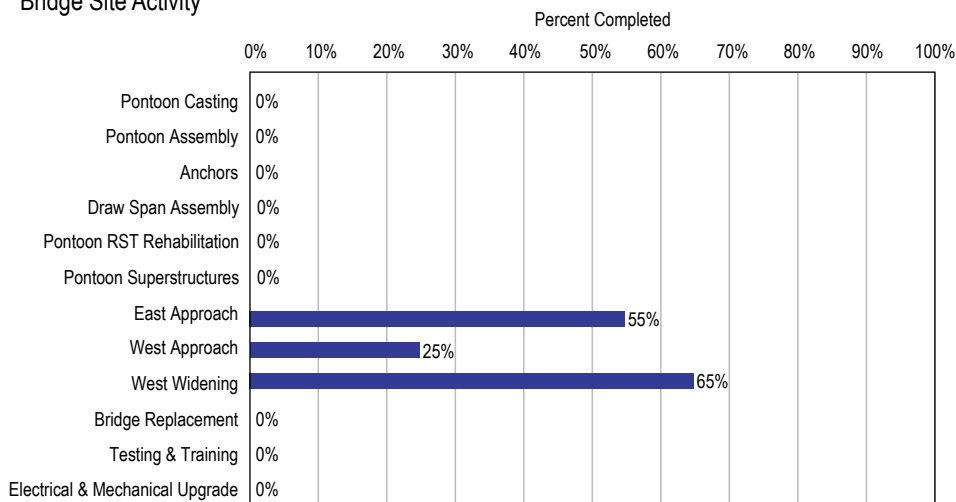
More than 800 comments were collected through e-mail comments, three-day closure questionnaires and a phone survey regarding preferred closure dates for the Hood Canal Bridge. WSDOT is using this information, Washington State Ferries capacity reports and 1998 Origin & Destination Study to guide the decision making process. A recommendation regarding preferred closure dates will be presented to the Hood Canal Bridge Project Director on May 10, 2005.

In April, WSDOT and the following organizations and publications worked together to help spread the word about the closures.

- 48 Degrees North magazine
- AAA Western Journey magazine
- Northwest Outdoors magazine
- Northwest Travel magazine
- Northwest Yachting magazine
- Olympic Peninsula Joint Marketing Cooperative
- Oregonian
- RV Journal
- RV Life magazine
- Seattle Times
- Sunset magazine
- Trailer Life magazine
- Washington Parks and Recreation Department
- Washington State Ferries
- Washington State Tourism
- Western Washington Vacation Guide

Project Site Completion Status

Bridge Site Activity



West approach span work



East approach span work

April 2005

Looking Ahead – May 2005

Bridge Site

West-half roadway widening (north side):

- Complete overhang demolition
- Begin crossbeam extensions on draw span pontoons

West-half approach span work:

- Complete Pier 2 crossbeam

East-half approach span work:

- Set girders for approach spans 5 and 6
- Complete end diaphragms on Piers 7 through 10
- Form deck for spans 7, 8, and 9
- Complete crossbeam 4
- Erect falsework tower for Pier 5
- Erect roll-off falsework

Anchor Cable Replacement

- Delivery of anchor cables
- Begin placement of cables

Graving Dock Site

- Select site
- Negotiate contract changes with Kiewit-General

Public Information

- Announce three-day closure preferred dates
- Complete detour map
- Distribute speaker's bureau postcard and closure advisory letter
- Hold presentation for Port Ludlow Village Council

New Faces, New Places – Hood Canal Bridge Project Team

John Wynands, *Chief Engineer, Hood Canal Bridge Team*



John Wynands joined Washington State Department of Transportation (WSDOT) in 1985 after graduating from the University of Washington. John's 20 years of experience in design, consultant administration and construction of WSDOT projects is a great asset to the Hood Canal Bridge Team, particularly his work

with the I-90 floating bridges.

Traveling is a favorite activity for John and his wife, Linda. John immigrated to the U.S. from Montreal, Canada, and hasn't stopped exploring. He spent three years working on an Alaskan cruise ship, traveled to Europe and Mexico and just returned from a long weekend in Las Vegas. John will go almost anywhere, as long as there is a good golf course at the end of his travels. At home, John and Linda enjoy their two cats, gardening and cooking.

Project Responsibilities: Overall engineering management for Hood Canal Bridge project design and construction. Questions? wynandsj@wsdot.wa.gov or (360) 704-6309.

Dewayne Matlock, *Design Coordinator, Hood Canal Bridge Team*



Dewayne found his way to WSDOT almost 15 years ago. He has gained experience in materials testing and surveying, inspecting, designing and constructing projects.

Dewayne is ready to meet the challenges of the Hood Canal Bridge contract just like he has met the challenges of climbing most of the major mountain peaks in the northwest. When Dewayne isn't climbing mountains (literally or figuratively) he might be golfing, biking or spending time with his wife, Lori Anne, and his two sons, Tyler (9) and Trevor (5).

Project Responsibilities: Coordination of contract updates and closure mitigation planning. Questions? matlocd@wsdot.wa.gov or (360) 704-6304.



This report highlights updated information regarding the Hood Canal Bridge Project. Additional information may be obtained from WSDOT's Olympic Region Communications Office at (360) 357-2789.

For more information about the Hood Canal Bridge Project, visit the HCB web site:
www.hoodcanalbridge.com

For more information, contact:

Lloyd D. Brown, Media Relations
(360) 357-2789 • brownl@wsdot.wa.gov

Eric Soderquist, Project Director
(360) 704-6310 • soderqe@wsdot.wa.gov

Becky Hixson, Community Outreach
(360) 704-6308 • hixsonb@wsdot.wa.gov



Hood Canal Bridge Retrofit and East Half Replacement Project

WEST-HALF WIDENING COMPLETION: 2005
EAST-HALF REPLACEMENT COMPLETION GOAL: 2009

May 2005

Floating Bridges Around the World

Less than a dozen operational pontoon bridges can be found worldwide. The United States has five pontoon bridges, four of them in Washington and the fifth in Hawaii. The other bridges are located throughout the world in Norway, Netherlands, Canada, Germany and Japan.

The bridges are as different as the countries where they can be found. The majority are made of concrete but one bridge is made mostly with fiberglass. A few bridges are still wood, and some are steel. They vary in length from several hundred feet in length to more than 2 miles long. Each bridge is uniquely designed to handle the specific elements and topography of the area.

Interesting highlights about some of the bridges are listed below. For more information and pictures, visit the source at <http://en.structurae.de/index.cfm>.



Albert D. Rosellini Bridge
SR 520, Seattle, WA



Kelowna Floating Bridge
Kelowna, BC, Canada*



Nordhordland Bridge
Bergen, Norway*

UNITED STATES

Bridge	Lacey V. Murrow	Homer Hadley	Albert D. Rosellini	Hood Canal Bridge	Admiral Clarey Bridge
Other Names	Lake Washington Floating Bridge, I-90 Bridge	Third Lake Washington Bridge	Evergreen Point Bridge, SR 520 Floating Bridge	William A. Bugge Bridge	Ford Island Bridge
Location	Seattle, I-90	Seattle, I-90	Seattle, SR 520	Hood Canal, SR 104	Pearl Harbor, Hawaii
Year Opened	1940	1989	1963	1961	1998
Length	1.7 miles (8,981 ft)	1.8 miles (9,559 ft)	2.3 miles (12,404 ft)	1.5 miles (7,866 ft)	1.1 miles (5,610 ft)
Unique Feature	First permanent floating bridge in WA.	Average daily traffic is 61,500.	Longest floating span in the world.	Accommodates 16.5' tides. Only floating bridge on saltwater.	Girders constructed at Concrete Tech in Tacoma.

AROUND THE WORLD

Bridge	Nordhordland Bridge	Queen Emma Bridge	Kelowna Floating Bridge	Bergsund Floating Bridge	Yumemai Bridge
Other Names	Nordhordlandsbrua	Swinging Old Lady	Okanagan Lake Bridge	Bergsundbrua	
Location	Bergen, Norway	Willemstad, Netherlands	Kelowna, BC, Canada	Kristiansund, Norway	Osaka, Japan
Year Opened	1994	1939	1958	1992	2001
Length	0.8 mile (4,088 ft)	0.1 mile (548 ft)	0.4 mile (2,100 ft)	0.6 mile (3,061 feet)	0.5 mile (2,880 ft)
Unique Feature	Curves. Longest laterally unsupported span in the world.	Wood deck. Swings from pivot point to open.	Vertical lift bridge.	Steel truss bridge.	Moveable swing-type arch construction.

*Photos courtesy of Robert Cortright, Bridge Ink

Work at the Bridge – May 2005

Anchor Cable Replacement

This month four anchor cables were replaced. How is it possible to replace a cable around a concrete anchor that is underwater? Read on for the fascinating details.

1. Release tension from both the north and south cables.
2. Disconnect the old cable from the anchor cable track.



Machinery used to attach new and old cables.

3. Attach the new cable to the old cable. A pad eye is welded to the end of the new cable and then it is attached to the socket of the old cable.
4. The old cable is wound on to a spool on the barge as the barge moves toward the anchor away from the bridge.



The new cable is pulled through the anchor yoke as the old cable is being wound on to a spool on the barge.



Jewelry being clamped into place.

5. Once the center of the new cable has been located (it is pre-marked on the cable), the "jewelry", or big metal beads, are centered and clamped in place over the cable. These beads keep the cable from rubbing on the concrete anchor and being worn down.



New cable being pulled off the spool.

6. Once the jewelry has been verified to be in the proper location via a remote operated vehicle (a submersible device with a camera mounted on it), the barge moves back toward the bridge, letting out cable as it goes.
7. Both ends of the cable are then pulled over the top of the pontoon deck and marked to cut.



The cut is determined from a calculation based on the final location of the anchor cable being centered on the anchor cable track.

8. Once cut, a socket is placed on the anchor cable ends. The cable is then brought into the anchor gallery and attached.



Anchor cable being prepared to be attached to the bridge.

9. Both north and south anchor cables are pulled tight.
10. Gaskets and watertight fixtures are put back in place.
11. Finished!

Bridge Site

West-half roadway widening (north side):

- | | |
|--------|--|
| May 20 | Completed north side overhang demolition |
| May 26 | Completed crossbeam extensions two pontoons. |



West-half approach span work:

- | | |
|--------|-------------------------|
| May 3 | Poured Pier 1 crossbeam |
| May 19 | Poured Pier 2 crossbeam |



East-half approach span work:

- May 4 Poured span 7 and 8 intermediate diaphragms (concrete supports between the girders)
- May 6 Poured Pier 4 crossbeam
- May 12 Set girders on span 5
- May 13 Set girders on span 6
- May 20 Completed Pier 4/5 strut beams
- May 24 Poured span 5 and 6 intermediate diaphragms (concrete supports between the girders)
- All month Worked on deck formwork
- All month Erected roll-off falsework

Transition Span Fabrication

In May, Mississippi Tank Company finished welding 18 steel transition span section joints. The welding of these joints is a three-step process. The six 24-foot sections of pipe are fitted into 40-foot sections and then tacked together with the first weld. The welders check to make sure everything is in the right place, then proceed with the final two welds. The completed steel tubes make up the top and bottom portions of the east transition span.

Once the welding on all bottom and top sections of pipe (18 total) is complete, the Mississippi Tank Company crew will fit and weld the diagonal pipes (40 total).



Shielded metal arc welding taking place on a bottom piece



Crew completing submerged arc welding on a bottom piece

Financial Picture

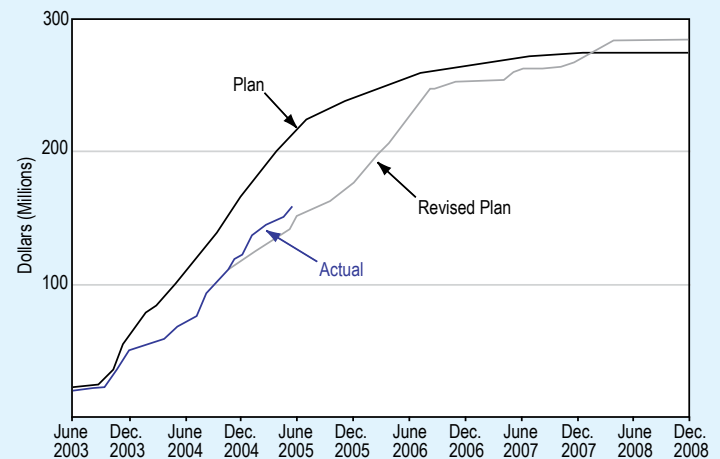
Project Cost Summary

Expenditures as of May 2005 (in millions)

Project Cost Summary	Budgeted	Expended
Preliminary Engineering	\$ 12.4	\$ 12.2
Right-of-Way	7.7	6.9
Construction	271.9	138.2
Total	\$292.0	\$157.3

Planned vs. Actual Expenditures

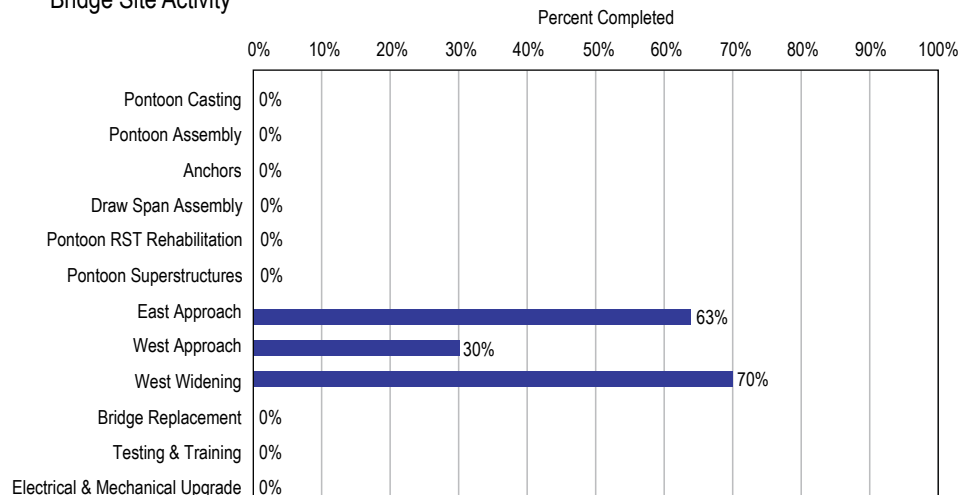
(Total Project Cost)



Source: WSDOT Hood Canal Bridge Project Office

Project Site Completion Status

Bridge Site Activity



Source: WSDOT Hood Canal Bridge Project Office

May 2005

Looking Ahead – June 2005

Bridge Site

West-half roadway widening (north side):

- Set girders on five pontoons
- Place forms in preparation for pouring concrete for road deck

West-half approach span work:

- Set five 155' girders
- Place forms in preparation for pouring concrete for road deck
- Place north and south side falsework

East-half approach span work:

- Pour concrete for end diaphragms
- Pour concrete for east approach span road deck

Anchor Cable Replacement

- Replace four anchor cables
- Clean anchor brackets

Graving Dock Site

- Continue site selection process
- Negotiate contract changes with Kiewit-General

Transition Span Fabrication

- Begin welding together forty diagonal sub-assemblies

Public Information

- Hold presentation for Port Orchard Chamber
- Announce final three-day closure dates
- Complete news media news conference plan
- Complete three-day closure mitigation plan

Just Point and Click

There is lots of information about the Hood Canal Bridge three-day closures on the project web site at www.hoodcanalbridge.com. ↗

Look for:

- Detour Map
- Driving Directions
- Details on what is happening during the closures
- What WSDOT is doing to keep traffic moving
- Photos of the work at the bridge
- Survival Tips
- Animation of approach span rollovers

Public Input Behind Hood Canal Bridge Closure Updates

The current schedule now under review by the project contractor, Kiewit-General of Poulsbo, would close the bridge twice in August — one weekday closure and one weekend closure. The closure dates remain tentative until late June.

Closed: 8 p.m. Thursday, Aug. 11

Open: 4 a.m. Monday, Aug. 15

Closed: 8 p.m. Sunday, Aug. 21

Open: 4 a.m. Thursday, Aug. 25

Staff has carefully examined the results of citizen questionnaires, an on-line survey and a telephone poll, Washington State Ferries tide and ridership information, Olympic Peninsula events, and the contractor's schedule. It is never easy to close a bridge like the Hood Canal Bridge that is so important to the local communities. WSDOT will continue to work with the contractor to provide bridge users advanced traveler information, to maintain an open and functioning US 101 during the closures, and to reopen the bridge on time.

New Faces, New Places – Hood Canal Bridge Project Team

Dean Moon, *Design Coordinator, Hood Canal Bridge Team*



Dean Moon joined WSDOT Northwest Region I-90 Construction office in 1990. His 15 years of experience has been centered on HOV design projects for NW Region and Pierce County.

Dean's attention to detail and knowledge of Olympic Region construction projects are essential skills for planning Hood Canal Bridge pontoon and anchor construction schedules.

In addition to designing bridges and roads, Dean knows a lot about houses. He takes great pride in the house he built for himself, his wife Amy and his two children, Emma, age 5, and Evan, age 2.

Dean is active and energetic. Hardly a day goes by when he isn't out running, swimming or biking. Dean also spends a good deal of time outdoors playing golf, hiking, hunting and working in the yard.

Project Responsibilities: Coordination of design related activities between Port Orchard office, Olympic region and Headquarters bridge office. Questions? moondr@wsdot.wa.gov or (360) 704-6307



This report highlights updated information regarding the Hood Canal Bridge Project. Additional information may be obtained from WSDOT's Olympic Region Communications Office at (360) 357-2789.

For more information about the Hood Canal Bridge Project, visit the HCB web site: www.hoodcanalbridge.com.

For more information, contact:

Lloyd D. Brown, Media Relations
(360) 357-2789 • brownl@wsdot.wa.gov

Eric Soderquist, Project Director
(360) 704-6310 • soderqe@wsdot.wa.gov

Becky Hixson, Community Outreach
(360) 704-6308 • hixsonb@wsdot.wa.gov



East approach road deck pour

Hood Canal Bridge Retrofit and East Half Replacement Project

WEST-HALF WIDENING COMPLETION: 2005

EAST-HALF REPLACEMENT COMPLETION GOAL: 2009

June 2005

Work at the Bridge – June 2005

Work at the bridge is progressing quickly. Day by day the approach spans take shape under the watchful eye of Hood Canal Bridge and Kiewit-General Construction Company crews. Bridge construction is on track to meet the August dates set aside for replacing the approach spans.



West-half approach span work

Special cranes set five 155-foot concrete girders in place on June 9. Due to this construction work, traffic near the bridge came to a standstill for several hours. WSDOT takes traffic delays very seriously and several changes were made to ensure the situation does not happen again.



East-half approach span work

Crews poured the final portion of the new east approach span road deck on June 29. Next steps to completing this approach span include building concrete traffic barriers and completing the diaphragms – concrete portions that connect the girders to each other and to the piers.



West-half roadway widening (north side)

Throughout the month, almost all the girders were placed. Reinforcing steel (rebar) was installed above the girders and the first road deck concrete was poured.



Anchor Cable Replacement

Crews replaced one anchor cable per week. This work is progressing quickly and should be finished several weeks ahead of schedule.



Transition Span Fabrication

Mississippi Tank Company finished welding 64 of 116 diagonal pipes needed to construct the steel transition spans.

Project Site Completion Status

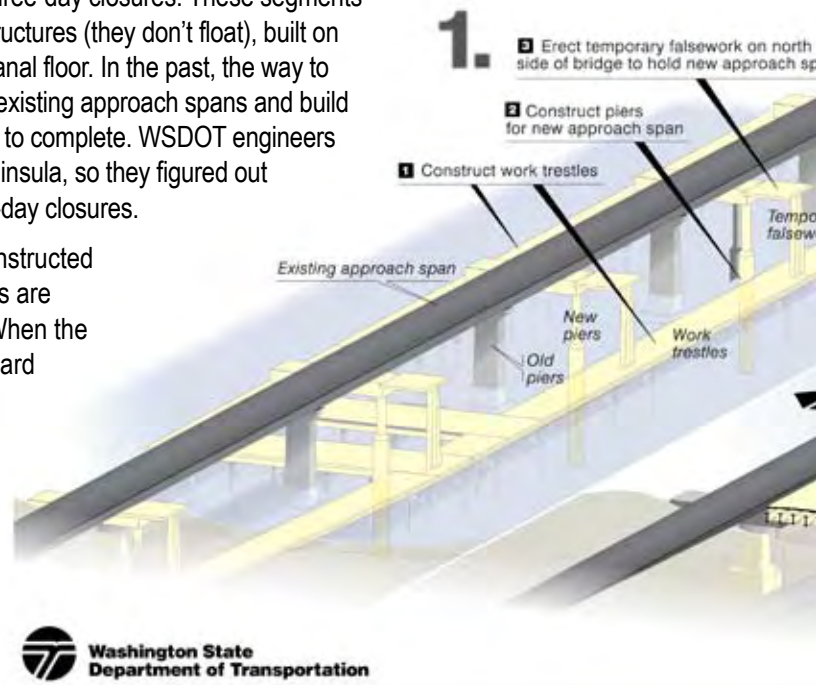
Bridge Site Activity	Percent Completed
East Approach	75%
West Approach	40%
West Widening	75%

Source: WDOT Hood Canal Bridge Project Office

Approach Span Replacement

The east and west approach spans will be replaced during the August three-day closures. These segments connect the floating bridge to the land. The approach spans are fixed structures (they don't float), built on concrete piers. The piers extend from 45 to almost 100 feet below the canal floor. In the past, the way to replace the approach spans would be to close the bridge, demolish the existing approach spans and build the new ones in their place. This process would have taken up to a year to complete. WSDOT engineers wanted to find a way to keep traffic moving to and from the Olympic Peninsula, so they figured out a better way to replace the approach spans that requires only two three-day closures.

Work trestles and falsework (huge scaffolding systems) have been constructed underneath and beside each approach span. The new approach spans are being constructed on the north side of the existing approach spans. When the new approach spans are ready, the existing ones will be rolled southward onto the temporary falsework, and the new approach spans will be rolled into place.



West-half approach span work
Roll-on and roll-off falsework are in place for the west-half approach span roll.

Looking Ahead – July 2005

Bridge Site

West-half roadway widening (north side):

- Pour concrete for the road deck on four of the pontoons
- Continue to place steel to widen the draw span

West-half approach span work:

- Pour the concrete road deck
- Complete south side falsework
- Pour concrete for the traffic barriers on each side of the entire approach span

East-half approach span work:

- Pour concrete for the traffic barriers on each side of the entire approach span
- Install items in preparation for the jacking and rolling operation that will occur during the August three-day closures

Anchor Cable Replacement

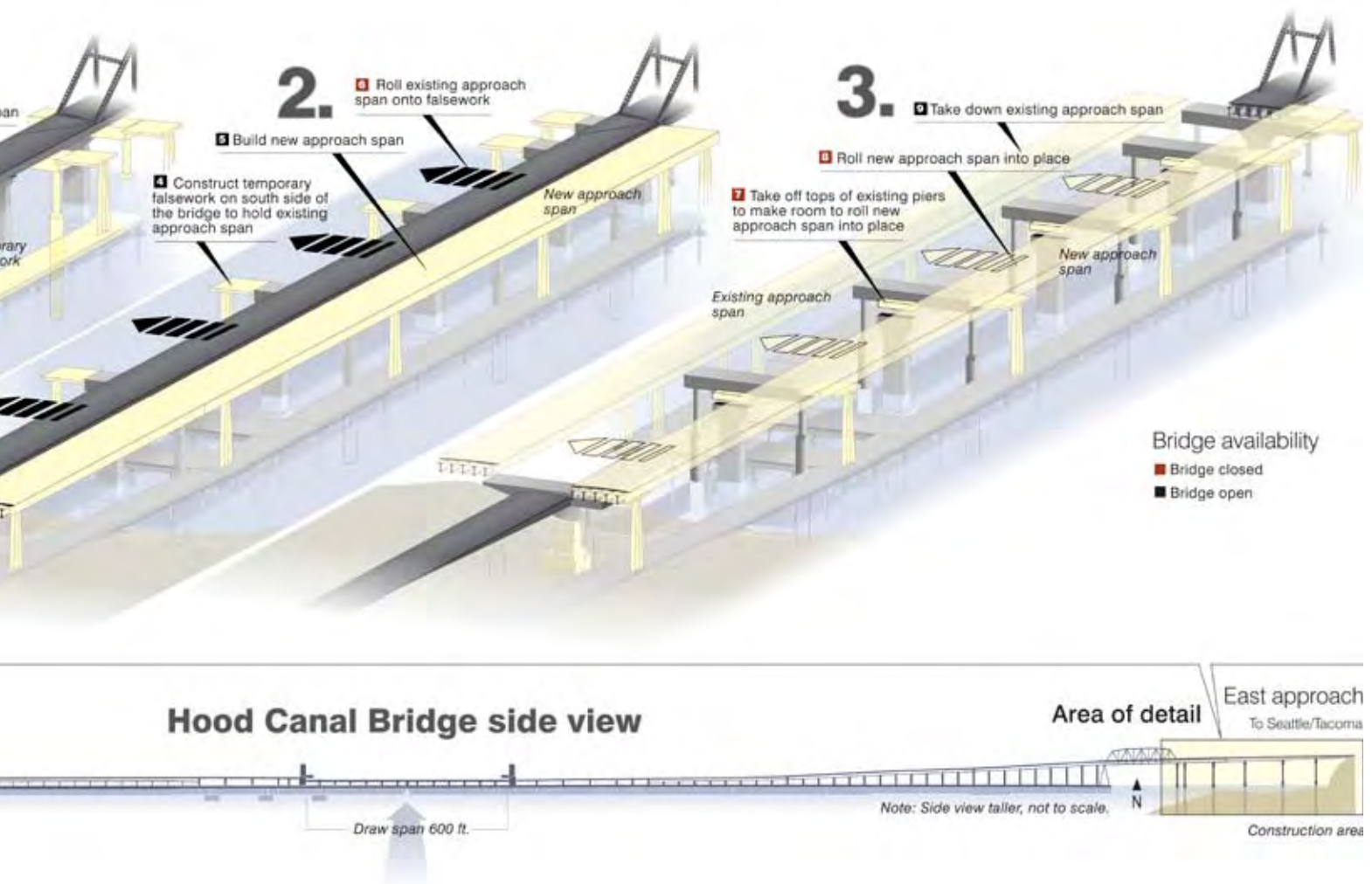
- Replace four anchor cables
- Clean anchor brackets

Graving Dock Site

- Continue site selection process
- Negotiate contract changes with Kiewit-General

Public Information

- Hold community presentations as requested
- Announce final three-day closure dates
- Prepare all three-day closure mitigation plan elements
- Create three-day closure media kit



Hood Canal Bridge Three-Day Closures

WSDOT staff started gearing up for the August three-day closures. An operations planning committee with representatives from the region Traffic office, Port Angeles Project Engineers office, Port Orchard Maintenance, Port Angeles Maintenance, Washington State Patrol, Hood Canal Bridge Project office, region Work Zone Traffic Control and Olympic Region communications started meeting on a weekly basis to implement the three-day closure mitigation plan. The plan elements include:



West-half approach span work
 One of the five concrete girder for the new approach span sits on the bridge awaiting placement.

- Increasing driver assistance along US 101.
- Using highway advisory radio, variable message signs and electronic media to share information with drivers.
- Expanding signage at key decision points.
- Coordinating with Washington State Ferries to help drivers find alternative routes.
- Working with tourism and business interests, local community groups and the Peninsula Regional Transportation Planning Organization to distribute information.

CLOSURE DATES

CLOSED: 8 p.m., Thursday, August 11
 OPEN: 4 a.m., Monday, August 15

CLOSED: 8 p.m., Sunday, August 21
 OPEN: 4 a.m., Thursday, August 25

For more information, visit www.hoodcanalbridge.com or call 1-877-595-HCB2 (4222).

June 2005

New Faces, New Places – Hood Canal Bridge Project Team

Todd Brown, *Transportation Engineer II, Hood Canal Bridge Team*



Todd Brown started his career with WSDOT as a temporary employee in 1997. He has worked in the Port Orchard Engineering Office a little more than six years, in Port Angeles for a year and in the Olympia Design office for about two months. It is not surprising that most of Todd's time with WSDOT has been near the Olympic Peninsula.

He grew up in the Kitsap County area and only left to complete his B.S. in Civil Engineering at Washington State University.

Todd spends a lot of his time checking contract plans and documenting the work at the bridge site. His good sense of humor and dedication to his job helps him focus, stay relaxed and build good relationships with fellow workers. Todd has withstood a lot of teasing this year, mainly because of the way he celebrated St. Patrick's Day – by standing under the Hood Canal Bridge in a kilt and playing tunes on his bagpipes.

Project Responsibilities: Construction support, including processing field data, material documentation, plan checking, and submittal review. Questions? BrownTA@wsdot.wa.gov or (360) 613-5355

George Allison, *Canal Site Manager, Kiewit-General Construction Company*



George Allison brought tremendous bridge construction experience and knowledge to the Hood Canal Bridge Team when he became Canal Site Manager for the Kiewit-General Construction Company. Not only has he worked for General for 12 years, he has also worked with various engineering firms and contractors on the Washington State

Convention Center project, the I-90 Lacey V. Murrow Bridge and numerous other bridges.

His ability to handle multiple problems and organize a variety of corresponding activities has served George well both in his professional and personal life. At work, he oversees safety, quality, productivity and scheduling aspects of canal site work while at home he balances his time between golfing, chipping away at his "honey-do" list, listening to Doo Wop, visiting his granddaughter and taking care of his 16 year-old orange tabby cat.

Project Responsibilities: Oversees safety, quality, productivity and scheduling aspects of canal site work. Questions? George.Allison@kiewit.com or (360) 598-4458

Financial Picture

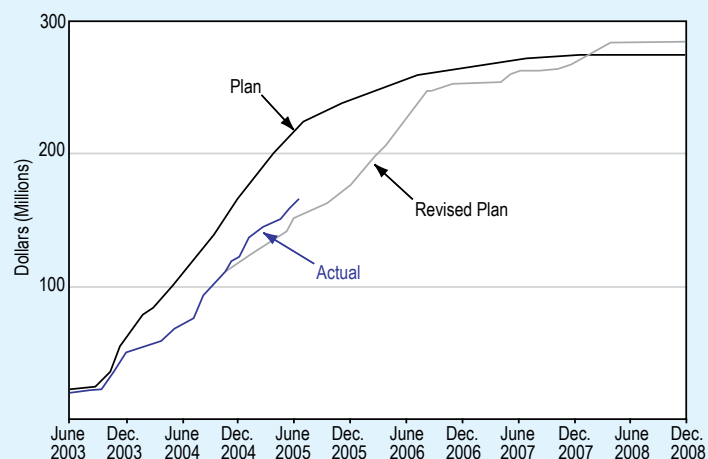
Project Cost Summary

Expenditures as of June 2005 (in millions)

Project Cost Summary	Budgeted	Expended
Preliminary Engineering	\$ 12.4	\$ 12.3
Right-of-Way	7.7	7.0
Construction	271.9	143.6
Total	\$292.0	\$162.9

Planned vs. Actual Expenditures

(Total Project Cost)



Source: WSDOT Hood Canal Bridge Project Office



This report highlights updated information regarding the Hood Canal Bridge Project. Additional information may be obtained from WSDOT's Olympic Region Communications Office at (360) 357-2789.

For more information about the Hood Canal Bridge Project, visit the HCB web site:
www.hoodcanalbridge.com.

For more information, contact:

Lloyd D. Brown, Media Relations
(360) 357-2789 • brownl@wsdot.wa.gov

Eric Soderquist, Project Director
(360) 704-6310 • soderqe@wsdot.wa.gov

Becky Hixson, Community Outreach
(360) 704-6308 • hixsonb@wsdot.wa.gov



Second Quarter Report

April-June 2005



Hood Canal Bridge Retrofit and East Half Replacement Project

WEST-HALF RETROFIT COMPLETION: 2005

EAST-HALF REPLACEMENT COMPLETION GOAL: 2009

MOVING FORWARD

The Hood Canal Bridge project is steadily moving forward toward the goal of delivering a world-class bridge. The highlights from this quarter were:

Construction Progress

Significant construction progress was made in the areas of approach span replacement, west-half bridge widening, east-half anchor cable replacement, and steel transition span and truss fabrication.

WSDOT staff completed evaluations of three preferred sites for pontoon and anchor construction: Port of Everett South Terminal, Port Ludlow Quarry at Mats Mats, and properties presented by the FCB Facilities Team. The preliminary site evaluations lead project staff to pursue negotiations with Kiewit-General Construction of Poulsbo (K-G) to build pontoons at existing facilities throughout Puget Sound. These negotiations continued throughout the quarter and will be completed by the end of the year.

Public Outreach and Partnerships

Public outreach efforts for the two August closures increased. Partnerships were established with 80 Jefferson, Clallum, Kitsap and Mason county businesses and service groups to help notify drivers about the closures.

Safety Update

Safety remained paramount for both WSDOT staff and the contractor. No lost workdays or restricted days were reported.

Financial Report

Of the \$292 million originally budgeted for the project, \$163 million had been spent as of June 2005. A new Hood Canal Bridge project budget will be updated and finalized once contract negotiations with Kiewit-General are completed.

Environmental Stewardship

Environmental stewardship remained a focus during project construction. Three incidents occurred at the bridge, none of which resulted in a penalty.



For more detailed information:

Construction Progress.....	Page 2
Public Outreach and Partnerships.....	5
Safety Update.....	6
Financial Report	6
Environmental Stewardship.....	8



Roll-off falsework begins to take shape for west (see photo above) and east (see photo below) approach span roll operations.

CONSTRUCTION PROGRESS

WSDOT staff and Kiewit-General, made significant construction progress in the areas of:

- Approach Span Replacement (East and West)
- West-half Roadway Widening
- East-half Anchor Cable Replacement
- Steel Transition Spans and Trusses (East and West)

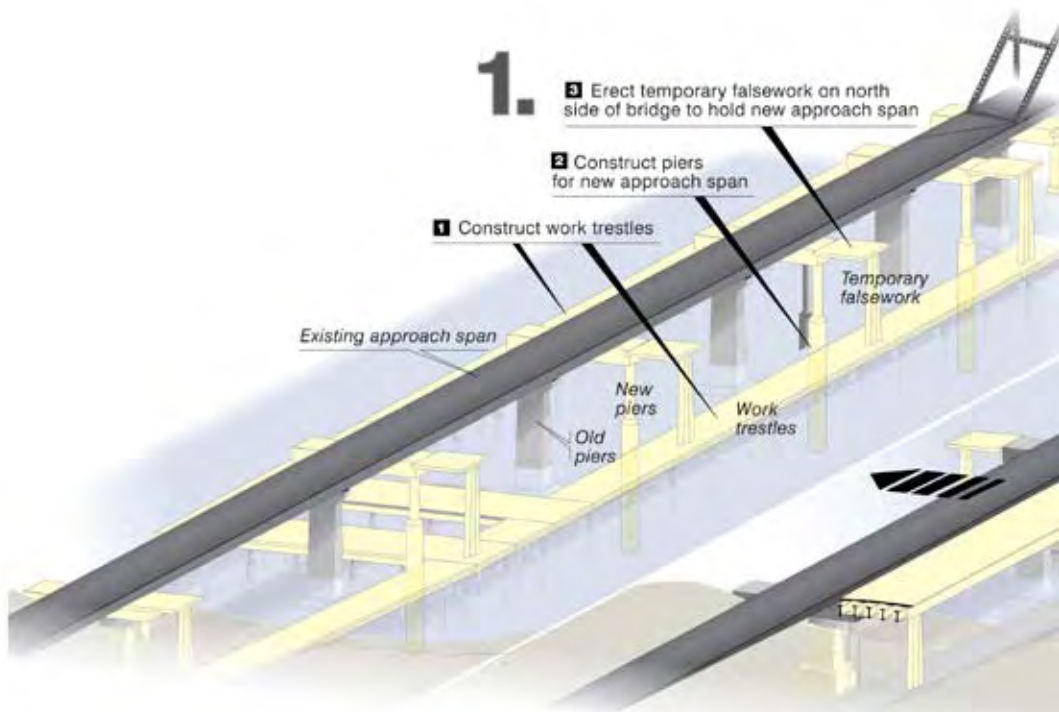
In addition, considerable progress was made toward finding a location to build platoons.

Project Site Completion Status

Percent Completed

East Approach	75%
West Approach	40%
West-half Roadway Widening	75%
Anchor Cable Replacement.....	50%

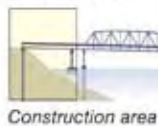
Source: WSDOT Hood Canal Bridge Project Office



Washington State
Department of Transportation

West approach

To Port Angeles



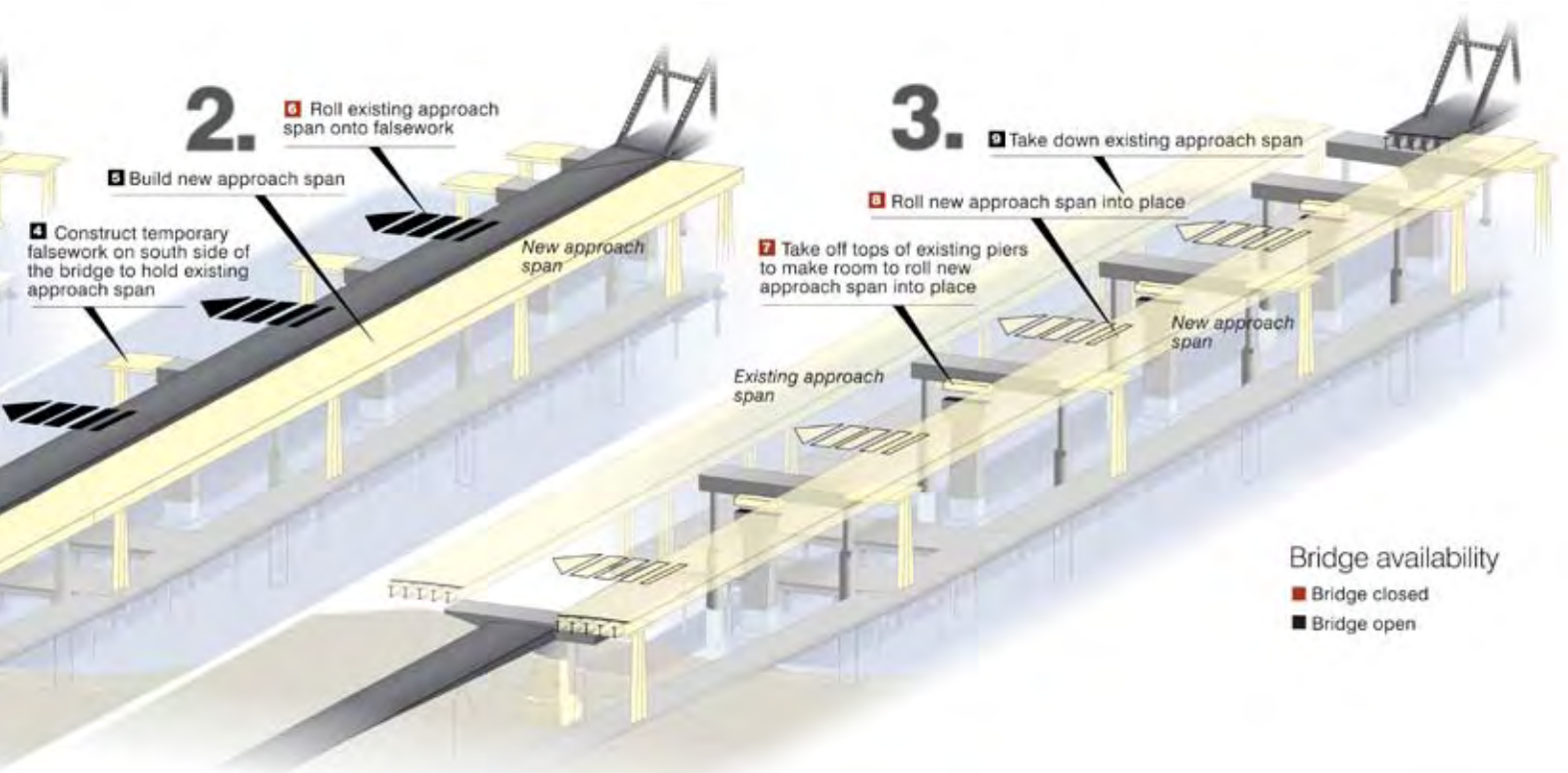
Construction area

APPROACH SPAN REPLACEMENT

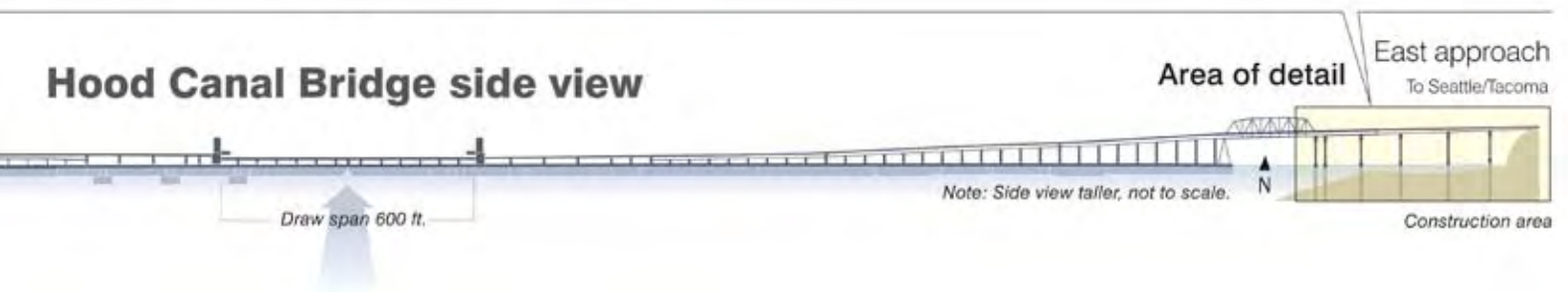
Work to install new approach structures on both the east and west sides of the bridge progressed.

The east and west approach spans will be replaced during the August closures. The approach spans connect the floating bridge to the land. These segments are fixed structures (they don't float), built on concrete piers. The piers extend from 45 to almost 100 feet below the canal floor. In the past, the way to replace the approach spans would be to close the bridge, demolish the existing approach spans and build the new ones in their place. This process would have taken up to a year to complete. WSDOT engineers wanted to find a way to keep traffic moving to and from the Olympic Peninsula, so they figured out a better way to replace the approach spans that requires only two August closures.

Work trestles and falsework (huge scaffolding systems) have been constructed underneath and beside each approach span. The new approach spans are being constructed on the north side of the existing approach spans. When the new approach spans are ready, the existing ones will be rolled southward onto the temporary falsework, and the new approach spans will be rolled into place.



Hood Canal Bridge side view



West-half approach span work included:

- Excavating, placing reinforcing steel, placing wood forms and pouring concrete to complete Pier 1 crossbeam
- Pouring concrete for Pier 2 crossbeam
- Placing five 155-foot concrete girders on crossbeams



Crews place wood forms for the new east approach span road deck.

East-half Approach Span work included:

- Placing epoxy-coated rebar and pouring concrete for Pier 4 crossbeam
- Completing crossbeam 5
- Setting concrete girders for spans 5-9
- Completing the end wall (retaining wall) at Pier 10
- Completing intermediate diaphragms (concrete supports between the girders) for spans 5-9
- Setting up all roll-on falsework towers
- Completing Pier 4/5 strut beams (concrete beams that connect the two piers and provide seismic stability)
- Placing wood forms and pouring concrete for new east approach span road deck



Crews set concrete girders for new east approach spans 5-9.



Crews install rebar for crossbeam extension on the west-half draw span pontoon

WEST-HALF ROADWAY WIDENING (north side):

The bridge's west half is being widened to match the new east half (to be installed in 2009). Last year the contractor worked along the south side. This summer, Kiewit-General will finish widening the north half. Good progress was made on cutting away the existing deck and setting new girders on crossbeams that were extended last year. Soon, deck sections will be formed and concrete poured for the new deck. In addition to widening the concrete road deck, Kiewit-General is widening the west half steel draw span. Crews hope to have the work completed by the end of September 2005.

The work caused regular nighttime lane closures across the Hood Canal Bridge. The project inspection team and Kiewit-General worked closely with a paving project on SR 3, near the bridge's east end. The extra coordination effort improved travel times through the two construction zones after construction caused major congestion and delays the evening of June 9.

West-half Roadway Widening work included:

- Cutting and removing all existing traffic barrier on the north side of the west-half roadway
- Completing demolition on the overhang on the north side
- Completing crossbeam extensions on two pontoons
- Placing girders
- Installing reinforcing steel (rebar) above the girders
- Pouring first road deck concrete

STEEL TRANSITION SPANS AND TRUSSES (EAST AND WEST)

Mississippi Tank Company welded 18 steel transition span section joints, formed the steel tubes that make up the top and bottom portions of the east transition span, and constructed 64 of 116 diagonal pipes needed for the steel transition spans.

EAST-HALF ANCHOR CABLE REPLACEMENT

General Construction began replacing 17 east-half anchor cables in May. The anchor cables were intended for replacement during the float-in of the new east-half pontoons. Unfortunately, delays in constructing pontoons meant that the aging cables would have to hold until at least 2009. Then, last year WSDOT maintenance crews discovered one of the anchor cables had broken. WSDOT engineers conducted a thorough inspection of the remaining cables and determined the cable replacement could not be delayed.

Crews replaced eight of the 17 cables by the end of June. This \$3.38 million installation contract progressed quickly and should be finished several weeks ahead of schedule, before the end of summer.

EAST-HALF BRIDGE REPLACEMENT

WSDOT staff evaluated proposals to determine when and where to build pontoons and anchors and identified three preferred sites for construction. The preferred sites include the Port of Everett South Terminal, Port Ludlow Quarry at Mats Mats, and properties presented by the FCB Facilities Team. The preliminary findings indicated the most prudent path would be to pursue construction at existing facilities throughout the Puget Sound.

The next steps in this process include:

- Securing lease option at existing facilities
- Negotiating contract changes with current contractor
- Obtaining permits

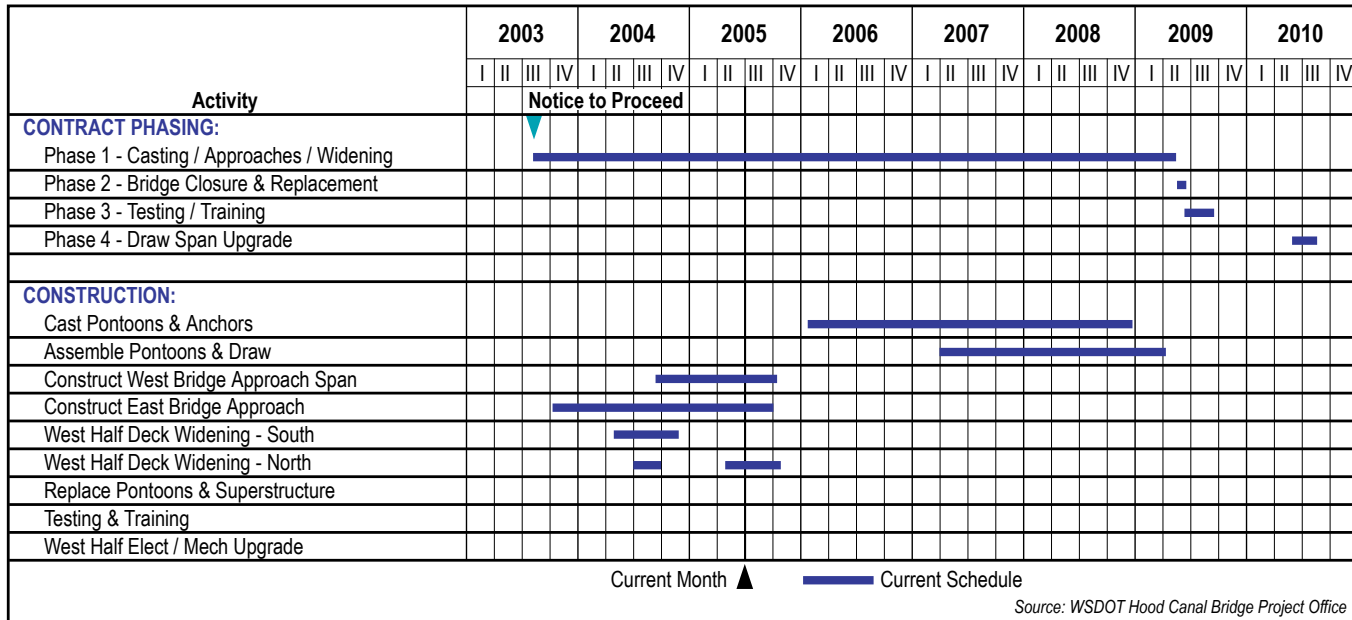
The anchor placement is tentatively scheduled for Summer 2008 and the east-half pontoon replacement should follow one year later in May-June 2009. Final project completion may be 2010.



Worker completes submerged arc welding on a bottom piece of the new east transition span.

SCHEDULE UPDATE

Physical completion of the project is estimated at 24%.



PUBLIC OUTREACH, PARTNERSHIPS AND CLOSURE PLANNING

The Hood Canal Bridge project will reach a major milestone this summer when the Contractor completes the replacement of both bridge approach spans by rolling away the existing bridge sections and rolling into place new sections of roadway. To accomplish the task, the Hood Canal Bridge will be temporarily closed in August.

Public Outreach

In April, more than 800 comments were collected through e-mail, three-day closure questionnaires and a phone survey regarding preferred closure dates for the Hood Canal Bridge. Staff carefully examined this information and worked with the contractor to tentatively schedule the three-day closures for 8 p.m. Thursday, Aug. 11 to 4 a.m. Monday, Aug. 15 and 8 p.m. Sunday, Aug. 21 to 4 a.m. Thursday, Aug. 25.



It is never easy to close a bridge that is so important to the local communities. WSDOT will be working with Kiewit-General to provide bridge users advanced traveler information, to maintain an open and functioning US 101 during the closures, and to reopen the bridge on time.

Partnerships

The first public outreach efforts included mailing a speaker's bureau postcard and closure advisory letter to Olympic Peninsula businesses. Information was also distributed by the following organizations and publications.

- 48 Degrees North magazine
- AAA Western Journey magazine
- Northwest Outdoors magazine
- Northwest Travel magazine
- Northwest Yachting magazine
- Olympic Peninsula Joint Marketing Cooperative
- Oregonian
- RV Journal
- RV Life magazine
- Seattle Times
- Sunset Magazine
- Trailer Life magazine
- Washington Parks and Recreation Department
- Washington State Ferries
- Washington State Tourism
- Western Washington Vacation Guide

Closure Planning

WSDOT staff started gearing up for the August three-day closures. An operations planning committee with representatives from the region Traffic office, Port Angeles Project Engineer's office, Port Orchard Maintenance, Port Angeles Maintenance, Washington State Patrol, Hood Canal Bridge Project office, region Work Zone Traffic Control and Olympic Region communications started meeting on a weekly basis to implement the three-day closure mitigation plan.

The plan elements include:

- Increasing driver assistance along US 101
- Using highway advisory radio, variable message signs and electronic media to share information with drivers
- Expanding signage at key decision points
- Coordinating with Washington State Ferries to help drivers find alternative routes
- Working with tourism and business interests, local community groups and the Peninsula Regional Transportation Planning Organization to distribute information

SAFETY UPDATE

Safety remained paramount for both WSDOT staff and Kiewit-General (K-G). No lost workdays or restricted days were reported this quarter.

PERSONNEL SUMMARY

April - June 2005

	Hours Worked	Recordable Cases	LWD Cases	Lost Workdays	Restricted Cases	Restricted Days	Fatalities
K-G	33,982	0	0	0	0	0	0
WSDOT	17,101	1	0	0	0	0	0
Total	51,083	1	0	0	0	0	0

The recordable injury attributed to WSDOT for this quarter was when an employee attempted to open a hatch with T-handle wrench, could not get it open, and injured their hand by striking it with the wrench. The employee was treated with first aid and had no lost time work days. Employee was instructed on the proper equipment to use for this activity in order to work safely.

Project To Date

	Hours Worked	Recordable Cases	LWD Cases	Lost Workdays	Restricted Cases	Restricted Days	Fatalities
K-G	315,185	2	0	0	0	0	0
WSDOT	169,022	2	0	0	0	0	0
Total	484,207	4	0	0	0	0	0

Project to date, the previous injury attributed to WSDOT during the life of the project included: While cutting brush with a machete, the individual cut himself with the machete and was treated with first aid; no time lost.

The two recordable cases of injury attributed to K-G are a hairline fracture of the wrist while operating a wrench and a hobo spider bite that became infected. Lost time was not available for these two recordable cases.

VEHICLE SUMMARY

WSDOT Hood Canal Bridge Project Office Vehicles

	Hours Worked	Recordable Cases	LWD Cases	Lost Workdays	Restricted Cases	Restricted Days	Fatalities
2005 Y-T-D	44,481	0	0	0	0	0	0
Project To-Date	169,022	3	0	0	0	0	0

No recordable vehicle accidents were attributed to WSDOT or K-G for this quarter.

Project to date, the three recordable vehicle accidents were:

- In icy conditions, vehicle slid across oncoming traffic, ended up in ditch. No injuries.
- Vehicle was parked next to dump truck on site. The vehicle's door was open as the dump truck took off. Vehicle's door was ripped off. No injuries.
- Vehicle was stopped at a stoplight behind a semi trailer. Vehicle in next lane rolled forward and hit the front of the truck. No injuries.

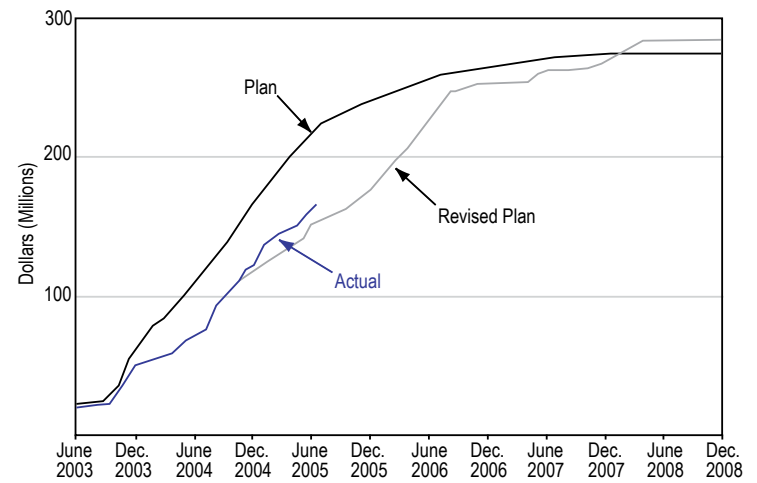
FINANCIAL REPORT

When the Hood Canal Bridge contract was awarded in June 2003, the project budget was \$275 million. Since that time, budget adjustments were made as new needs arose – anchor cable replacement, inflation in cost of goods and services and archaeological efforts. With these additional work items included, the project budget was \$292 million. Of that \$292 million, \$163.2 million was spent as of June 2005.

This budget would have covered the cost of building pontoons and anchors at the graving dock in Port Angeles. By moving to a different location, the costs associated with completing the job changed. Additional expenses include costs associated with stopping the work, re-pricing the contract to use another facility, materials storage and escalation of costs for labor, equipment and materials. The Hood Canal Bridge project budget will be updated and finalized once contract negotiations are completed.

FINANCIAL REPORT, continued**Project Cost Summary***Expenditures as of June 2005 (in millions)*

Project Cost Summary	Budgeted	Expended
Preliminary Engineering	\$ 12.4	\$ 12.3
Right-of-Way	7.7	7.0
Construction:		
Payments to contractor	238.7	116.2
Contract management	33.2	27.4
Total	\$292.0	\$162.9

*Source: WSDOT Hood Canal Bridge Project Office***Planned vs. Actual Expenditures**
(Total Project Cost)*Source: WSDOT Hood Canal Bridge Project Office***Construction Costs**

Payments to the contractor totaled approximately \$116 million (including sales tax) through June 2005. This includes payments for material on hand (~\$26 million), anchor cable replacement (\$2 million), change orders for business impacts related to the graving dock suspension (~\$10 million), and change orders related to the work at the existing bridge site (~\$800,000).

Outstanding Issues / Potential Impacts to Cost:

- Site location selection for pontoons and anchors
- Finalizing past contractor costs and determining payment method
- Negotiating future contractor costs at new site(s)

Contractor Payments vs Completion Status*Period Ending June 30, 2005*

Item	Plan			Actual			
	Bid		% of Phys Work	Expenditures To Date		Phys % Complete	
	Amount	%		Amount	%	Item	Project
Mobilization	19,900,000	9.7%	0.2%	19,830,000	99.6%	100.0%	0.2%
Graving Dock Construction	29,900,000	14.7%	18.0%	28,491,000	95.3%	28.9%	5.2%
Casting	53,400,000	26.1%	28.0%	216,000	0.4%	0.3%	0.1%
Pontoon Casting	44,300,000	21.7%	15.0%	216,000	0.5%	0.5%	0.1%
Anchor Casting	9,100,000	2.4%	13.0%	—	0.0%	0.0%	0.0%
Pontoon Assembly / Superstructure	33,400,000	16.4%	19.0%	—	0.0%	0.0%	0.0%
Pontoon & Drawspan Assembly & Electrical	20,100,000	9.9%	8.0%	—	0.0%	0.0%	0.0%
Pontoon Superstructure & RST	13,300,000	6.5%	11.0%	—	0.0%	0.0%	0.0%
Approaches / Widening	29,100,000	14.3%	28.5%	20,502,000	70.5%	65.1%	18.6%
East Approach	18,000,000	8.8%	15.0%	13,316,000	74.0%	70.0%	10.5%
West Approach	3,900,000	1.9%	7.0%	2,375,000	60.9%	50.0%	3.5%
West Widening	7,200,000	3.5%	6.5%	4,811,000	66.8%	70.0%	4.6%
Pontoon / Truss Replacement	32,200,000	15.8%	4.0%	1,160,000	3.6%	0.0%	0.0%
Anchor Installation	3,500,000	1.7%	2.0%	—	0.0%	0.0%	0.0%
Replace Bridge - Truss	22,200,000	10.9%	0.0%	—	0.0%	0.0%	0.0%
Replace Bridge - Remove & Replace	6,500,000	3.2%	2.0%	1,160,000	17.8%	0.0%	0.0%
Phase 3 & 4 - Mech / Elect Work	6,100,000	3.0%	2.3%	—	0.0%	0.0%	0.0%
Testing & Training - East Bridge	300,000	0.1%	0.3%	—	0.0%	0.0%	0.0%
Mech & Elect - West Bridge	5,800,000	2.8%	2.0%	—	0.0%	0.0%	0.0%
Total Original Contract	204,000,000	100.0%	100.0%	70,199,000	34.4%	n/a	24.1%
MOH - Materials on Hand				26,022,000			
Change Orders (Adjusted for Overruns)	16,000,000			10,711,000			
Sales Tax	18,700,000			9,258,000			
Total Project	238,700,000			116,190,000			

Notes: 1. Differences between actual earnings % and item % is primarily due to material (MOH) payments and prep work; 2. Contract durations in workdays: Ph 1 = 595, Ph 2 = 30, Ph 3 = 40, Ph 4 = 70 Total = 735; 3. Planned physical % of work is based on total workday durations of each area as provided in the contractor's current schedule and then adjusted; 4. Actual physical % of work is based on estimated work performed; 5. Bid amounts for mob, drawspan and fab truss include large non-work activities.

Source: WSDOT Hood Canal Bridge Project Office

ENVIRONMENTAL STEWARDSHIP

Three incidents occurred, none of which resulted in penalties.

- **K-G derrick grounded in eelgrass bed.**

This incident was reported to Washington State Fish and Wildlife. WSWF and WSDOT conducted a follow up assessment of the nearby eelgrass beds and determined that there was no damage.

- **Water used to cure the concrete bridge deck dripped into Hood Canal.**

This incident was reported to Washington State Department of Ecology. WSDOT immediately fixed the problem by decreasing the amount of water used and placing absorbent materials around the concrete pour area. No more incidents occurred. As a result, DOE did not issue any findings or penalties.

- **A small quantity of “wet” concrete dripped into Hood Canal.**

This incident was reported to Washington State Department of Ecology. WSDOT evaluated the situation, identified the cause behind the incident and immediately corrected it by applying additional sealant to the pour area immediately before a concrete pour began. No more incidents occurred. As a result, DOE did not issue any findings or penalties.

WSDOT continued to monitor environmental impacts associated with the Hood Canal Bridge Project.

- Battelle Environmental conducted quarterly eelgrass monitoring. They also monitored lighting under the work trestles and issued a report to National Oceanic Atmospheric Administration Fisheries recommending no additional lighting be added to the trestle.
- Kiewit-General and WSDOT worked on the details for demolition of the existing piers after the roll-on of the new approach spans.

LOOKING AHEAD: JULY-SEPTEMBER 2005

Bridge Site

West-half roadway widening (north side):

- Pour concrete for the road deck on four of the pontoons
- Continue to place steel to widen the draw span

West-half approach span work:

- Pour the concrete road deck
- Complete south side falsework
- Pour concrete for the traffic barriers on each side of the entire approach span
- Complete west approach span replacement

East-half approach span work:

- Pour concrete for the traffic barriers on each side of the entire approach span
- Install items in preparation for the jacking and rolling operation
- Complete west approach span replacement

Anchor Cable Replacement

- Replace the remaining anchor cables
- Clean anchor brackets

Graving Dock Site

- Continue site selection process
- Negotiate contract changes with Kiewit-General

Public Information

- Hold community presentations as requested
- Announce final three-day closure dates
- Create three-day closure media kit
- Complete news media news conference plan
- Complete three-day closure mitigation plan
- Provide communications and media relations support during the August closures



This report highlights updated information regarding the Hood Canal Bridge Project work April-June 2005. Additional information may be obtained from WSDOT's Olympic Region Communications Office at (360) 357-2789.

For more information about the Hood Canal Bridge Project, visit the HCB web site:
www.hoodcanalbridge.com.

For more information, contact:

Lloyd D. Brown, Media Relations
(360) 357-2789 • brownl@wsdot.wa.gov

Eric Soderquist, Project Director
(360) 704-6310 • soderqe@wsdot.wa.gov

Becky Hixson, Community Outreach
(360) 704-6308 • hixsonb@wsdot.wa.gov



Preparation continues on the east half approach span replacement



WSDOT inspector tests concrete before new west approach span deck pour



Crew completes Pier 3 concrete pour

Hood Canal Bridge Retrofit and East Half Replacement Project

WEST-HALF RETROFIT COMPLETION: 2005

EAST-HALF REPLACEMENT COMPLETION GOAL: 2009

July 2005

What It Takes To Close A Bridge

Getting ready for the State Route 104 Hood Canal Bridge three-day closures required extensive planning, preparation and effort by the operations planning committee. Representatives from the region Traffic office, Port Angeles Project Engineers office, Port Orchard Maintenance, Port Angeles Maintenance, Washington State Patrol, Hood Canal Bridge Project office, region Work Zone Traffic Control and Olympic Region communications focused on providing advance notification, helping drivers find alternative travel options, efficiently putting the mitigation plan in place and finding effective ways to quickly update drivers when the bridge opened. Here is what they accomplished prior to the closures.

- 1 camera installed to record the approach span rollovers
- 2 traveler courtesy stations organized
- 3 boat ramp closed signs posted
- 4 permanent variable message signs ready to light up
- 5 Highway Advisory Radio transmitters activated
- 6 freight associations notified
- 7 portable variable message signs prepared to post messages
- 8 full-page ads scheduled in regional newspapers
- 9 days of on-board ferry announcements scheduled
- 19 bright orange bridge info signs installed
- 24 hour-a-day phone coverage for information line
- 36 new web pages created on www.hoodcanalbridge.com
- 50 links established to project web site
- 65 WSDOT staff participated in plan implementation
- 80 local partnerships created
- 100 posters hung on area ferries
- 180 radio spots booked on Port Angeles radio station KONP
- 300 letters mailed to area businesses
- 4,500 miles driven locating, staking and inspecting signs
- 35,000 detour maps distributed
- 75,000 tabloids inserted in local newspapers
- 123,000 postcards mailed directly to area homes



Work at the Bridge - July 2005



Week of July 1-7

- Tied epoxy-coated steel rebar in preparation for west-half widening deck pour
- New steel framing set in place for west-half bridge spans
- West-half widening deck concrete poured for 1 pontoon



Week of July 8-14

- Poured concrete for west-half approach span road deck
- Finished pouring concrete for east side Piers 6, 7, 8 and 9 end diaphragms (concrete supports between the girders)
- Completed setting all girders for west-half widening
- Poured concrete for east-side Pier 10 south wing wall (retaining wall parallel to the bridge)



Week of July 15-21

- West-half deck widening concrete poured for two pontoons
- New steel framing set in place for west-half bridge spans
- Poured Piers 5 and 10 expansion plate concrete



Week of July 22-28

- Completed north- and south-side east approach span traffic barriers
- Poured concrete for north- and south-side west approach span traffic barriers
- Poured concrete for west-side Pier 3 crossbeam
- West-half widening deck concrete poured for 3 pontoons



Week of July 29-31

- Stripped wood forms from new west and east approach spans
- New steel framing set in place for west-half bridge spans
- Worked on roll-off falsework (temporary steel support structures)
- Prepared for approach span roll

Project Site Completion Status

Bridge Site Activity	Percent Completed
East Approach	85%
West Approach	85%
West Widening	80%

Source: WSDOT Hood Canal Bridge Project Office

New Faces, New Places – Hood Canal Bridge Project Team

George Titterness, *Transportation Engineer 3, Hood Canal Bridge Team*



The SR 104 Hood Canal Bridge project has been one of the most challenging and interesting projects for George Titterness. He developed the hydraulic report and storm water site plan for the Port Angeles Graving Dock during the project's design phase of the project. He worked on site as the Environmental Compliance Inspector and a Field Supervisor. George coordinated work between the contractor, the archaeologists, the Lower Elwha Klallam Tribe, and WSDOT in addition to his normal duties, like pontoon mock-up construction. Most recently, he led the project's three-day closure mitigation planning and implementation efforts.

George began his career as a party chief on a private survey crew. He had no idea then that the valuable experience he gained from doing this specialized survey work would help him during his 21-years of service for WSDOT.

In addition to his survey skills, George's design skills, attention to detail and can-do attitude have served him well as he worked on the Port Townsend Ferry Terminal, the Bogachiel River Bridge, the Dungeness River Bridge and the Sequim Bypass design.

Other things hold George's interest besides challenging design projects. Those include listening to Blues, taking amateur photos of Blues musicians, traveling, hiking, genealogy, and playing with his grandkids. Twice he has ridden his bicycle to the top of Hurricane Ridge and recommends everyone do that at least once in his or her life. Unfortunately, he has yet to recruit his wife Diane, daughter, three sons, two granddaughters and one grandson to join him on that venture.

Project Responsibilities: Three-day closure mitigation planning and implementation. Questions? TitterG@wsdot.wa.gov or (360) 457-2575

Gary Davis, *General Superintendent, Kiewit-General Construction Company*



The west and east approach span replacements and the roll technology utilized during this process have been Gary's primary responsibility. With 33 years of construction experience, he is well suited for the task.

Gary has worked for General Construction for 13 years, mostly on water-related projects such as the I-90 floating bridge. His 20 years of work for Riedel International in Portland, Oregon included port docks, recreational piers in California and numerous bridges up and down the west coast and Columbia River. He even went to Valdez, Alaska to work on the pipeline terminal and the Exxon Valdez oil spill.

On land or sea, Gary loves to be outside even when he isn't working. He and his wife, Jane, enjoy boating with family and friends whenever possible and spend the early weekend mornings on horse back in the hills behind their home. Even with commuting to and from Portland, Gary still finds time to ride his four horses year-round plus spoil the six dogs and two cats he rescued from animal shelters or picked up as strays.

Project Responsibilities: Trestle installation, drilled shafts, falsework support for existing and new approach spans, approach span rolls and demolition of old approach spans. Questions? Gary.Davis@kiewit.com or (360) 461-9116

Financial Picture

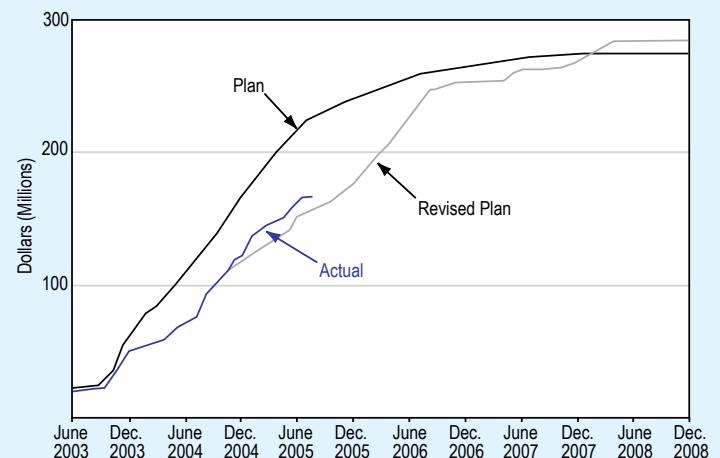
Project Cost Summary

Expenditures as of July 2005 (in millions)

Project Cost Summary	Budgeted	Expended
Preliminary Engineering	\$ 12.4	\$ 12.3
Right-of-Way	7.7	7.0
Construction	271.9	148.6
Total	\$292.0	\$167.9

Planned vs. Actual Expenditures

(Total Project Cost)



Source: WSDOT Hood Canal Bridge Project Office

July 2005

Looking Ahead – August 2005

Bridge Site

West-half roadway widening (north side):

- Pour concrete for the road deck on four of the pontoons
- Pour concrete for traffic barriers on four of the pontoons
- Continue to place epoxy coated rebar on lift spans

West-half approach span work:

- Roll new approach span (August 11-15)

East-half approach span work:

- Install items in preparation for the jacking and rolling operation
- Roll new approach span (August 21-25)

Anchor Cable Replacement

- Check anchor cable placement via a remote operated vehicle (a submersible device with a camera mounted on it)

Graving Dock Site

- Continue site selection process
- Negotiate contract changes with Kiewit-General

Public Information

- Hold media field day
- Escort media during three-day closures
- Coordinate three-day closure mitigation elements



Assembling temporary supports for the existing west approach span

What is an approach span?

- Approach spans are fixed structures (they don't float), built on concrete piers that connect the floating bridge to the land.
- New approach spans are being constructed adjacent to the existing roadway. During the closures, the existing approaches will be rolled onto temporary supports, and the new approach spans will be rolled into place.
- During the rollover, the roadway sections will reach a top speed of approximately 5 feet per hour. A typical northwest banana slug can reach speeds of approximately 37 feet per hour.

East vs. West Approach Spans

During the closures – one closure for each bridge end – the contractor will place the existing approach span on rollers; roll that existing span onto temporary falsework; and roll the new roadway into place.

West

- 190-feet long, about the length of the Goodyear Blimp
- 2.2 million pounds (1,110 tons)
- 757 liner feet of girders
- 1,841 cubic yards of concrete
- 208 tons of epoxy coated reinforcing steel
- 6,000 pounds of structural steel
- 17,000 pounds of stainless steel

East

- 640-feet long, more than two football fields in length
- 7.6 million pounds (3,810 tons), the equivalent in weight to moving more than 100 gray whales or 500 male African elephants
- 2,960 liner feet of girders
- 5,810 cubic yards of concrete
- 778 tons of epoxy coated reinforcing steel
- 12,000 pounds of structural steel
- 50,000 pounds of stainless steel

This report highlights work accomplished for the Hood Canal Bridge Project from July 1-31, 2005. Additional information may be obtained from WSDOT's Olympic Region Communications Office at (360) 357-2789.

For more information about the Hood Canal Bridge Project, visit the HCB web site:

www.hoodcanalbridge.com.

For more information, contact:

Lloyd D. Brown, Media Relations
(360) 357-2789 • brownl@wsdot.wa.gov

Eric Soderquist, Project Director
(360) 704-6310 • soderqe@wsdot.wa.gov

Becky Hixson, Community Outreach
(360) 704-6308 • hixsonb@wsdot.wa.gov





Workers use compressed air to clear the bearing pads on which the bridge rollers will roll.



Crews pave west approach as they get ready to open the roadway.



Old east approach span roll is complete.

Hood Canal Bridge Retrofit and East Half Replacement Project

WEST-HALF RETROFIT COMPLETION: 2005

EAST-HALF REPLACEMENT COMPLETION GOAL: 2009

Monthly Report, August 2005



Going Places – Hood Canal Bridge Project Team

I want to extend my heartfelt thanks for all those involved with the two August Hood Canal Bridge closures.

The closures for the east and west approach span replacements went extremely well. Traffic moved smoothly, drivers traveled safely during both closures and the community was well prepared. We know this effort succeeded because many people found ways to inform others about the closures, partner with other community members and provide alternate travel options for those who rely on the bridge for their livelihood, to get to medical care and to enjoy leisure activities.

Completing this milestone is an important step toward providing a stronger, wider and safer bridge that will last for decades. The project is moving forward to complete the next major milestone – replacing the east half of the bridge. I look forward to strengthening our community partnerships over the next few years as we work to provide Olympic and Kitsap peninsula residents and visitors information about the Hood Canal Bridge Project.

For up-to-date reports on the project, visit our website, www.hoodcanalbridge.com. If you have any thoughts about how we might improve our community outreach, please don't hesitate to contact our Communication Manager, Becky Hixson, at (360) 704-6308 or hixsonb@wsdot.wa.gov.

Thank you for being a part of preserving this vital link in Washington's transportation system, the Hood Canal Bridge, and for helping make this phase of the project so successful.

Sincerely,

Eric Soderquist
Project Director

Hood Canal Bridge Approach Span Replacements Completed

West Approach Span Replacement

(8 p.m. August 11 - 10:20 p.m. August 13)

WSDOT's contractor, Kiewit-General of Poulsbo, started work to replace the 2.2 million pound, 190-foot-long west-half approach span, at 8 p.m. August 11. The lack of problems with the bridge deck rolls helped move the weekend-long closure ahead of schedule. WSDOT used unique techniques – such as pre-cast walls and roadway sections – to accommodate a shorter closure. The old approach span was moved onto temporary pilings in just 2.5 hours. The new west-half approach span was in place by 6 p.m., about four hours ahead of schedule. The bridge reopened Saturday night, more than a day ahead of its Monday morning deadline.

East Approach Span Replacement

(8 p.m. August 21 - 8:42 p.m. August 23)

Increased crew size helped the contractor, Kiewit-General of Poulsbo, move ahead on approach slab work at the same time as pier demolition and the new approach span roll. Coordinating the work in this manner helped move the closure ahead of schedule. The contractor also did not experience major problems rolling the new approach span – more than two football fields long – into place on Aug. 22. The replacement of the bridge's 640-foot-long east-half approach span was completed more than a day ahead of the planned schedule.

Approach Span Replacement Process

- Step 1 Disconnect phone and power lines to the existing approach span
- Step 2 Cut the existing approach span road deck at both ends to disconnect it from the transition span and the asphalt
- Step 3 Set up all the jacks under the existing approach span
- Step 4 Jack the existing approach span up on to the rollers
- Step 5 Roll the existing approach span on to the temporary falsework
- Step 6 Demolish and remove roadway approach slabs
- Step 7 Set pre-cast end wall or retaining wall at the end of the approach span
- Step 8 Finish the end wall
- Step 9 Remove the tops of existing piers
- Step 10 Remove jacks from the existing approach span and place under new approach span
- Step 11 Jack the new approach span up on to the rollers
- Step 12 Roll the new approach span into place
- Step 13 Install permanent bearing pads at each pier
- Step 14 Remove all jacks from the new approach span
- Step 15 Install new roadway approach slabs
- Step 16 Install expansion joint
- Step 17 Pave and stripe roadway
- Step 18 Reconnect power and phone lines
- Step 19 Open to traffic



Crews cut old approach span away from transition span. 10 p.m. Thursday, August 11



Old approach span about halfway through the process of moving 40 feet to the south. 3 a.m. Friday, August 12



Crews break up asphalt and remove it to make room for the new approach slabs. 11 a.m. Monday, August 22



Cranes set the end pre-cast end (or retaining) wall into place. 2 p.m. Monday, August 22

August 2005 Closures Review

The Hood Canal Bridge approach span replacements were completed in August 2005. Thanks to drivers, community members, the media, Kiewit-General of Poulsbo and WSDOT staff, the two closures needed to complete this work went well.

Goals Accomplished

- The public relations strategy to utilize existing communication networks to distribute information was very effective.
- A targeted and specific outreach plan increased the efficiency of the outreach efforts. The traveling public was well prepared to detour around the bridge during the two closures.
- There was minimal disruption for travelers who were unaware of the closures at the time they set out as a result of outreach efforts by community partners.
- Peninsula business owners and residents were well prepared and understood the need and benefit of the closures.
- The public's confidence in WSDOT was strengthened.



The top of the pier that had supported the old roadway is removed to make way for the new roadway. **12 p.m. Friday, August 12**



Both the rolls are complete and the new approach span is in its final place. **6 p.m. Friday, August 12**



The crew sets the pre-cast concrete approach slabs in place. **1 p.m. Saturday, August 13**



The new east approach span is in place and the rollers are removed one pier at a time. **4 a.m. - 11 a.m. Tuesday, August 23**



Jacks lift the new approach span to make room for installing the permanent bearing pads. **4 a.m. - 11 a.m. Tuesday, August 23**



Crews install the expansion joint between the new approach span and the transition span. **5 p.m. Tuesday, August 23**

Lessons Learned

- There is room for improving communications with the Highway Advisory Radio. The radio transmissions need to cover a larger area.
- WSDOT should provide a better description of the bridge's location so travelers know whether the closure affects their route.
- The large geographic area impacted by the bridge closure requires more staff to manage the signing and provide timely information to drivers.
- Traffic control for US 101, SR 106 and SR 3 was effective. No major backups or traffic snarls occurred during the closures.
- WSDOT should develop more detailed opening and closing protocols for opening either earlier or later than planned.
- Drivers need a system that provides real-time traffic reports near the bridge and on alternate routes.
- Postponing construction and maintenance work on roads near the bridge contributed to smoothly flowing traffic on the alternate driving routes.

Preparing for the eight-week closures in 2009

First-hand information was collected regarding the effectiveness of various communication mechanisms to assist in planning for the future eight-week closure, including reports from Olympic Peninsula business, chambers and visitor centers, traffic counts, calls to Hood Canal Bridge information line, ferry ridership, visits to project website and media coverage. This information will be compiled into a summary report, which will be used to review the eight-week closure plan and make adjustments if needed. The eight-week closure planning started in 1998 and will continue until the estimated closure date of May-June 2009.

A forum will be provided to allow for public comment on the eight-week closure mitigation plan.

August 2005

Looking Ahead – September 2005

Bridge Site

West-half roadway widening (north side):

- Complete the concrete traffic barrier and install railings
- Place down spouts
- Remove wood forms from new road deck
- Paint the new steel on the lift span

West-half approach span work:

- Complete drainage system, fill behind wing walls (retaining walls parallel to the bridge) and grade gravel in preparation for approach slab placement
- Install the last two concrete precast approach slabs
- Construct concrete barrier on precast approach slabs and install railing
- Pave and stripe west approach roadway
- Demolish old approach structure
- Remove roll-on falsework (north side of approach span)

East-half approach span work:

- Complete drainage system, fill behind wing walls (retaining walls parallel to the bridge) and grade gravel in preparation for approach slab placement
- Install the last two concrete precast approach slabs
- Construct concrete barrier on precast approach slabs and install railing
- Pave and strip east approach roadway
- Demolish old approach structure
- Remove roll-on falsework (north side of approach span)
- Install longitudinal stops and bearing pads

Graving Dock Site

- Negotiate contract changes for building and assembling pontoons at existing facilities

Public Information

- August closure community presentations
- Closure summary report

Financial Picture

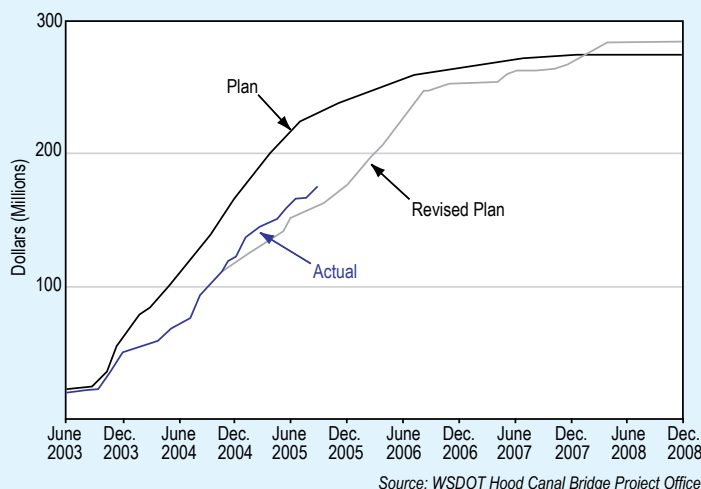
Project Cost Summary

Expenditures as of August 2005 (in millions)

Project Cost Summary	Budgeted	Expended
Preliminary Engineering	\$ 12.4	\$ 12.3
Right-of-Way	7.7	7.0
Construction	271.9	156.0
Total	\$292.0	\$175.3

Planned vs. Actual Expenditures

(Total Project Cost)



Project Site Completion Status

Bridge Site Activity	Percent Completed
East Approach	90%
West Approach	95%
West Widening	90%

Source: WSDOT Hood Canal Bridge Project Office



This report highlights updated information regarding the Hood Canal Bridge Project from August 1-31, 2005. Additional information may be obtained from WSDOT's Olympic Region Communications Office at (360) 357-2789.

For more information about the Hood Canal Bridge Project, visit the HCB web site:
www.hoodcanalbridge.com.

For more information, contact:

Lloyd D. Brown, Media Relations
 (360) 357-2789 • brownl@wsdot.wa.gov

Eric Soderquist, Project Director
 (360) 704-6310 • soderqe@wsdot.wa.gov

Becky Hixson, Community Outreach
 (360) 704-6308 • hixsonb@wsdot.wa.gov



Third Quarter Report

July–September 2005



Hood Canal Bridge Retrofit and East Half Replacement Project

WEST-HALF RETROFIT COMPLETION: 2005

EAST-HALF REPLACEMENT COMPLETION GOAL: 2009

MOVING FORWARD

A major milestone was reached when the Hood Canal Bridge east and west approach spans were replaced during the August closures. During the closures, traffic moved smoothly, drivers traveled safely during both closures and the community was well prepared. Completing this milestone was an important step toward providing a stronger, wider and safer bridge that will last for decades. The project is moving forward to complete the next major milestone – replacing the east half of the bridge. The highlights from this quarter were:

Construction Progress

Construction progressed rapidly through the summer months. Approach spans were replaced, west-half roadway widening work was almost finished, east-half anchor cables were replaced and steel transition span and truss fabrication neared completion.

WSDOT and Kiewit-General neared the end of a negotiations process regarding future construction work.

Public Outreach and Partnerships

Public outreach efforts for the two August closures were completed. The operations planning committee put forth an extensive planning and preparation effort getting ready for the Hood Canal Bridge three-day closures. Preliminary evaluation and feedback show that both the public outreach efforts and mitigation planning were effective in helping the public prepare for the closures and find alternate routes.

Safety Update

Safety remained paramount for both WSDOT staff and the contractor. No recordable injuries were reported during this period.

Financial Report

Of the \$292 million originally budgeted for the project, \$179.6 million had been spent as of September 2005. The Hood Canal Bridge project budget will be updated and finalized once contract negotiations with Kiewit-General are completed.

Environmental Stewardship

Environmental stewardship remained a focus during project construction. No incidents occurred at the bridge. WSDOT continued to monitor environmental impacts associated with the project.



For more detailed information:

Construction Progress.....	Page 2
Public Outreach and Partnerships.....	5
Safety Update.....	6
Financial Report	6
Environmental Stewardship.....	8



Crews work to secure precast end wall before new east approach span is moved into place.

CONSTRUCTION PROGRESS

The summer months brought intensive construction effort by WSDOT staff and Kiewit-General.

Project Site Completion Status

Percent Completed as of 9-30-05

East Approach	96%
West Approach	97%
West-half Roadway Widening	95%
Anchor Cable Replacement.....	100%
Transition Spans.....	15%

Source: WSDOT Hood Canal Bridge Project Office

APPROACH SPAN REPLACEMENT

WEST APPROACH SPAN REPLACEMENT

(8 p.m. August 11 - 10:20 p.m. August 13)

WSDOT's contractor, Kiewit-General of Poulsbo, started work to replace the 2.2 million pound, 190-foot-long west end approach span, at 8 p.m. August 11. The lack of problems with the bridge deck rolls helped move the weekend-long closure ahead of schedule. WSDOT used techniques – such as pre-cast walls and roadway sections – to accommodate a shorter closure. The old approach span was moved onto temporary falsework in just 2.5 hours on Thursday evening. The new west-half approach span was in place by 6 p.m. on Friday, about four hours ahead of schedule. The bridge reopened Saturday night, more than a day ahead of its Monday morning deadline.

West-half approach span work included:

- Pouring concrete for approach span road deck, traffic barriers and Pier 3 crossbeam
- Stripping wood forms from new approach span
- Working on roll-off falsework (temporary steel support structures)
- Preparing for and completing approach span roll
- Placing precast approach slabs after the roll was complete
- Installing drainage
- Grading embankment north and south of Pier 1
- Removing concrete deck and steel superstructure from old approach structure
- Removing roll-off falsework for Piers 1, 2 and 3
- Installing Pier 3 cat-walk



Crew working to complete west approach span retaining wall before new approach span is moved in place.



New west approach span is moving into place.



Crews install precast approach spans on the west side of the bridge.



Crane removes top of old pier to make room for new east approach span to roll into place.



The old east approach span is out of the way and the new east approach span is moving into place.

EAST APPROACH SPAN REPLACEMENT

(8 p.m. August 21 - 8:42 p.m. August 23)

Increased crew size helped the contractor, Kiewit-General of Poulsbo, move ahead on approach slab work at the same time as pier demolition and the new approach span roll. Coordinating the work in this manner helped move the closure ahead of schedule. The contractor also did not experience major problems rolling the new approach span – more than two football fields long – into place on Aug. 22. The replacement of the bridge's east-half 640-foot-long east-half approach span was completed more than a day ahead of the planned schedule.

East-half approach span work included:

- Pouring concrete for Piers 6, 7, 8 and 9 end diaphragms (concrete supports between the girders), Pier 10 south wing wall (retaining wall parallel to the bridge), Pier 5 and 10 expansion plates and traffic barriers
- Stripping wood forms from new approach spans
- Working on roll-off falsework (temporary steel support structures)
- Preparing for and completing approach span roll
- Installing drainage
- Grading embankment north and south of Pier 10
- Removing concrete deck from old approach structure
- Starting demolition work on old substructure (girders and piers)

Approach Span Replacement Process

- | | |
|---------|---|
| Step 1 | Disconnect phone and power lines to the existing approach span |
| Step 2 | Cut the existing approach span road deck at both ends to disconnect it from the transition span and the asphalt |
| Step 3 | Set up jacks under the existing approach span |
| Step 4 | Jack the existing approach span up on to the rollers |
| Step 5 | Roll the existing approach span on to the temporary falsework |
| Step 6 | Demolish and remove roadway approach slabs |
| Step 7 | Set pre-cast end wall or retaining wall at the end of the approach span |
| Step 8 | Finish the end wall |
| Step 9 | Remove the tops of existing piers |
| Step 10 | Remove jacks from the existing approach span and place under new approach span |
| Step 11 | Jack the new approach span up on to the rollers |
| Step 12 | Roll the new approach span into place |
| Step 13 | Install permanent bearing pads at each pier |
| Step 14 | Remove all jacks from the new approach span |
| Step 15 | Install new roadway approach slabs |
| Step 16 | Install expansion joint |
| Step 17 | Pave and stripe roadway |
| Step 18 | Reconnect power and phone lines |
| Step 19 | Open to traffic |



West-half widening concrete poured in place and traffic barrier nearing completion.

WEST-HALF ROADWAY WIDENING (north side):

The bridge's west half is being widened to match the new east half (to be installed in 2009). Last year the contractor worked along the south side. This summer, Kiewit-General will finish widening the north half. Good progress was made in forming new deck sections and pouring concrete. In addition to widening the concrete road deck, Kiewit-General is widening the west half steel draw span. The estimated completion date for the road widening work is the first week of November. The final work includes removing the old traffic barrier, installing new traffic and barrier gates and re-striping the roadway.

West-half roadway widening work included:

- Placing all girders
- Setting new steel framing in place for lift (draw) span
- Tying epoxy-coated steel rebar in preparation for west-half widening deck pour
- Pouring concrete for road deck and traffic barrier
- Installing railing on top of the traffic barrier

STEEL TRANSITION SPANS AND TRUSSES (east and west)

Mississippi Tank Company finished welding all 116 diagonal pipes needed for the steel transition spans. Shipping approval has been given to 83 of the 116 pipes. MTC is now focusing on grinding and inspection (visual, radiography, ultrasonic, magnetic particle) operations for the remaining 33 pipe sections.

EAST-HALF ANCHOR CABLE REPLACEMENT

General Construction finished replacing 17 east-half anchor cables in July, ahead of schedule and under budget. Anchor cable placement was then checked via a remote operated vehicle (a submersible device with a camera mounted on it). WSDOT's traditional role in construction projects includes quality control and inspecting the contractor's work. In this case, since WSDOT inspectors do not own the equipment for deep sea driving, they reviewed the videotapes taken by the remote operated vehicle to ensure proper anchor cable placement.

EAST-HALF BRIDGE REPLACEMENT

WSDOT staff continued to pursue construction at existing facilities throughout the Puget Sound and negotiating contract changes with Kiewit-General.

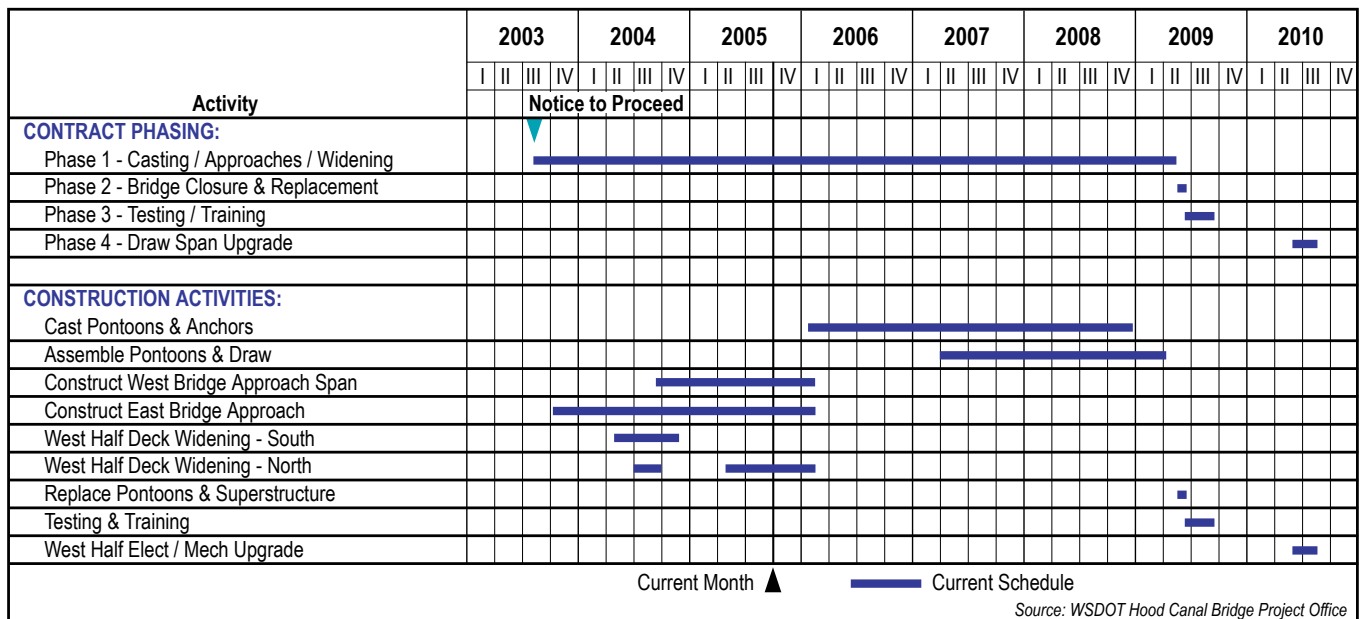
The next steps in the process include:

- Signing change order
- Obtaining permits
- Starting pontoon construction

The anchor placement is tentatively scheduled for Summer 2008 and the east-half pontoon replacement should follow one year later in May-June 2009. Final project completion is expected in 2010.

SCHEDULE UPDATE

Physical completion of the project is estimated at 33%.



PUBLIC OUTREACH, PARTNERSHIPS AND CLOSURE REPORTING

August 2005 Closure Traffic Patterns

Vehicle traffic across the bridge slowed to just a trickle prior to each closure. Traffic on the detour routes flowed smoothly. More travelers took a ferry. Olympic Peninsula residents and tourists to the region were prepared for the closures and changed their travel patterns.

Where did the traffic go?

Deferred Trips

Seventy-five percent of the 15,000 to 20,000 average daily trips across the Hood Canal Bridge didn't make the trip at all during the closures, choosing instead to shop, to eat or to visit locally. Or the motorists simply chose to reschedule their trips until the bridge re-opened.

The number of 2005 deferred trips represents about three times more than are expected for the 2009 eight-week closure. The high percentage of deferred trips seems to be due to drivers' willingness to delay a trip, reschedule an appointment, take time off work or drive a different way because they only had to adjust their schedules for a few short days. Some options utilized to get around the bridge during the August closure will not be viable for drivers when faced with eight-week closure.

Used a detour

The remaining 25 percent of drivers that did not defer their trip accessed three main detour options: driving US 101, taking the Washington State Ferries (WSF) Port Townsend/Keystone ferry route, or riding the temporary passenger-only ferry service (POF) between Port Townsend and Seattle.

Driving US 101

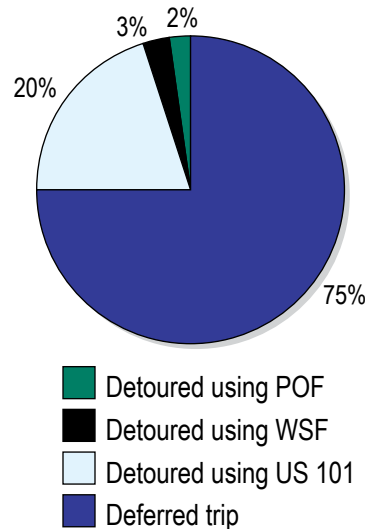
The US 101 route represented 19 percent of closure travelers during the first closure (weekend) and 23 percent during the second closure (weekday). This data was gathered using nine traffic counters placed around the northeast Peninsula along the US 101 detour route during the closures. Some observations were gleaned from the US 101 traffic data.

1. Drivers left earlier than normal to accommodate longer trips along the US 101 detour route.
2. There was a 40 percent increase in traffic at US 101 in Quilcene during the weekday closure and 30 percent increase during the weekend closure as compared to typical August traffic.
3. More than half of the closure related traffic continued on US 101 instead of taking SR 106.
4. There was a 13 percent (weekday) to 17 percent (weekend) increase at the SR 3 and SR 106 intersection near Belfair. To the south of the intersection, there was a less than 10 percent increase over normal traffic volumes. Increases in traffic volume during the weekend closure tended to be in the mornings, while was no discernable difference in time of day during the weekday closure.

The numbers along this driving route may be substantially higher for the 2009 closure. The information gathered will help WSDOT better evaluate projected 2009 traffic patterns.



August 2005 Closure Traffic Patterns



TRIP	AVERAGE	WEEKDAY	WEEKEND
<i>Ferries</i>	5%	4%	5%
<i>Detour US 101</i>	20%	23%	19%
<i>Deferred</i>	75%	73%	76%

Taking A Ferry

The two ferry options represented less than 5 percent of normal bridge traffic. The Port Townsend/Keystone route showed the highest increase on WSF vessels with a 30 percent increase in weekend traffic and a 39 percent increase in weekday traffic over the closure period, amounting to an average of about 500 additional vehicles accommodated per day. This ferry run was very important in getting drivers to and from the peninsula and easing traffic on US 101 driving route.

Passenger-only ferry service was limited to infrequent runs connecting Port Townsend/Seattle and Port Ludlow/Kingston. We cannot draw conclusions about configuring the passenger-only ferry route for the 2009 closure based on the small numbers of riders on the Port Ludlow route. However, the ridership from Port Townsend/Seattle was close to the number forecasted for people wanting to travel to directly to Seattle.

SAFETY UPDATE

Safety remained paramount for both WSDOT staff and Kiewit-General (K-G). No lost workdays or restricted days were reported this quarter.

PERSONNEL SUMMARY

July - September 2005

	Hours Worked	Recordable Cases	LWD Cases	Lost Workdays	Restricted Cases	Restricted Days	Fatalities
K-G	34,528	0	0	0	0	0	0
WSDOT	4,070	0	0	0	0	0	0
Total	38,598	0	0	0	0	0	0

No recordable injuries were attributed to WSDOT or Kiewit-General for this quarter.

Project To Date

	Hours Worked	Recordable Cases	LWD Cases	Lost Workdays	Restricted Cases	Restricted Days	Fatalities
K-G	349,481	2	0	0	0	0	0
WSDOT	173,092	2	0	0	0	0	0
Total	522,573	4	0	0	0	0	0

The previous injuries attributed to WSDOT during the life of the project included:

- Employee attempted to open a hatch with T-handle wrench, could not get it open and injured their hand by striking it with the wrench. The employee was treated with first aid and had no lost time or work days. Employee was instructed on the proper equipment to use for this activity in order to work safely.
- While cutting brush with a machete, the individual cut himself with the machete and was treated with first aid; no time lost.

The two recordable cases of injury attributed to K-G are a hairline fracture of the wrist while operating a wrench and a hobo spider bite that became infected. Lost time information was not available for these two recordable cases.

VEHICLE SUMMARY

WSDOT Hood Canal Bridge Project Office Vehicles

	Hours Worked	Recordable Cases	LWD Cases	Lost Workdays	Restricted Cases	Restricted Days	Fatalities
2005 Y-T-D	44,481	0	0	0	0	0	0
Project To-Date	169,022	3	0	0	0	0	0

No recordable vehicle accidents were attributed to WSDOT or K-G for this quarter.

Project to date, the three recordable vehicle accidents were:

- In icy conditions, vehicle slid across oncoming traffic, ended up in ditch. No injuries.
- Vehicle was parked next to dump truck on site. The vehicle's door was open as the dump truck took off. Vehicle's door was ripped off. No injuries.
- WSDOT vehicle was stopped at a stoplight behind a semi trailer. Vehicle in next lane rolled forward and hit the front of the WSDOT truck. No injuries.

FINANCIAL REPORT

When the Hood Canal Bridge contract was awarded in June 2003, the project budget, which included the cost of building pontoons and anchors at the graving dock in Port Angeles, was \$275 million. Since that time, budget adjustments were made as new needs arose – anchor cable replacement; inflation in cost of goods and services; and, archaeological efforts. Including these additional work items, the February 2005 project budget was \$292 million. Of that \$292 million, \$179.6 million was spent as of September 2005.

Moving pontoon and anchor construction to different locations changes the costs associated with completing the job. Existing

facilities around the Puget Sound offer the best production schedule and less risk than building a new graving dock, but necessitate a budget increase. Additional funds are needed to cover costs associated with stopping the work, re-pricing the contract to use other facilities, parts storage and escalation of costs for labor, equipment and materials. The full extent of the additional costs can not be quantified until negotiations with K-G were completed. To ensure enough funding for project completion and cover anticipated cost increases, \$162 million was included in the 2005 Transportation Partnership Account.

FINANCIAL REPORT, continued**Project Cost Summary**

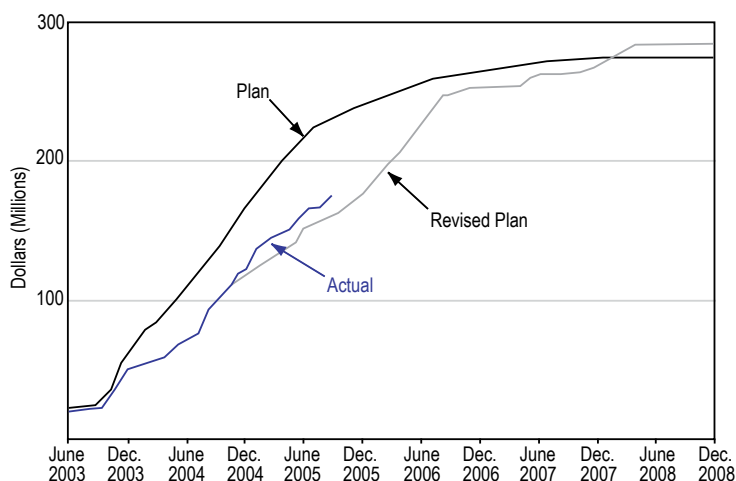
Expenditures as of September 2005 (in millions)

Project Cost Summary	Budgeted	Expended
Preliminary Engineering	\$ 12.4	\$ 12.4
Right-of-Way	7.7	7.0
Construction	271.9	160.2
Total	\$292.0	\$179.6

Source: WSDOT Hood Canal Bridge Project Office

Planned vs. Actual Expenditures

(Total Project Cost)



Source: WSDOT Hood Canal Bridge Project Office

Construction Costs

The construction costs for the project were budgeted to be \$271.9 million. As of September, payments to the contractor total approximately \$130.3 million (including sales tax). This includes payments for material on hand (~\$26.5 million), change orders for business impacts related to the graving dock suspension (~\$10 million), and change orders related to the work at the existing bridge site (~\$800,000). The remaining construction budget covers contract management by WSDOT.

Outstanding Issues / Potential Impacts to Cost:

- Site location selection for anchors
- Negotiating future contractor costs at new site(s)

Contractor Payments vs Completion Status

Period Ending September 30, 2005

Item	Plan			Actual			
	Bid		% of Phys Work	Expenditures To Date		Phys % Complete	
	Amount	%		Amount	%	Item	Project
Mobilization	19,900,000	9.8%	0.2%	19,830,000	99.6%	100.0%	0.2%
Graving Dock Construction	29,900,000	14.7%	18.0%	28,500,000	95.3%	28.9%	5.2%
Casting	53,400,000	26.2%	28.0%	300,000	0.6%	0.3%	0.1%
Pontoon Casting	44,300,000	21.7%	15.0%	300,000	0.7%	0.5%	0.1%
Anchor Casting	9,100,000	2.4%	13.0%	—	0.0%	0.0%	0.0%
Pontoon Assembly / Superstructure	33,400,000	16.4%	19.0%	—	0.0%	0.0%	0.0%
Pontoon & Drawspan Assembly & Electrical	20,100,000	9.9%	8.0%	—	0.0%	0.0%	0.0%
Pontoon Superstructure & RST	13,300,000	6.5%	11.0%	—	0.0%	0.0%	0.0%
Approaches / Widening	29,100,000	14.3%	28.5%	26,500,000	91.1%	65.1%	27.4%
East Approach	18,000,000	8.8%	15.0%	16,800,000	93.3%	70.0%	14.4%
West Approach	3,900,000	1.9%	7.0%	3,700,000	94.9%	50.0%	6.8%
West Widening	7,200,000	3.5%	6.5%	6,000,000	66.8%	70.0%	6.2%
Pontoon / Truss Replacement	32,200,000	15.8%	4.0%	2,170,000	6.7%	0.0%	0.0%
Anchor Installation	3,500,000	1.7%	2.0%	—	0.0%	0.0%	0.0%
Replace Bridge - Truss	22,200,000	10.9%	0.0%	570,000	2.6%	0.0%	0.0%
Replace Bridge - Remove & Replace	6,500,000	3.2%	2.0%	1,160,000	24.6%	0.0%	0.0%
Phase 3 & 4 - Mech / Elect Work	6,100,000	3.0%	2.3%	—	0.0%	0.0%	0.0%
Testing & Training - East Bridge	300,000	0.1%	0.3%	—	0.0%	0.0%	0.0%
Mech & Elect - West Bridge	5,800,000	2.8%	2.0%	—	0.0%	0.0%	0.0%
Total Original Contract	204,000,000	100.0%	100.0%	77,300,000	37.9%	n/a	32.9%
MOH - Materials on Hand				26,500,000			
Change Orders (Adjusted for Overruns)	18,000,000			16,000,000			
Sales Tax	18,426,000			10,540,000			
Total Project	240,426,000			130,340,000	54.2%	n/a	n/a

Notes: 1. Differences between actual earnings % and item % is primarily due to material (MOH) payments and prep work; 2. Contract durations in workdays: Ph 1 = 595, Ph 2 = 30, Ph 3 = 40, Ph 4 = 70 Total = 735; 3. Planned physical % of work is based on total workday durations of each area as provided in the contractor's current schedule and then adjusted; 4. Actual physical % of work is based on estimated work performed; 5. Bid amounts for mob, drawspan and fab truss include large non-work activities.

Source: WSDOT Hood Canal Bridge Project Office

ENVIRONMENTAL STEWARDSHIP

WSDOT continued to monitor environmental impacts associated with the Hood Canal Bridge Project.

- Battelle Environmental conducted quarterly eelgrass monitoring.
- Kiewit-General and WSDOT worked on the details for demolition of the existing piers after the roll-on of the new approach spans.



Crane removes girders from old west approach span.



First sections of old east approach span are removed.

LOOKING AHEAD: OCTOBER–DECEMBER 2005

Bridge Site

West-half roadway widening (north side):

- Complete railing on top of new traffic barrier
- Complete concrete finishing
- Place traffic and barrier gates
- Remove temporary traffic barrier
- Add striping on roadway

West-half approach span work:

- Complete Pier 1 embankment
- Complete drainage
- Place permanent striping
- Place concrete for barrier on the precast approach slabs
- Install new guardrail
- Remove north trestle
- Place storm gate
- Complete electrical work

East-half approach span work:

- Complete Pier 10 embankment and final approach grading
- Complete drainage
- Install last two precast approach panels
- Pave approach
- Place permanent striping
- Place concrete for barrier on the precast approach slabs
- Install new guardrail/concrete barrier
- Complete conduit runs for storm gates and advanced warning signs
- Place storm gates
- Complete electrical work on east approach
- Continue with substructure removal

Graving Dock Site

- Finish site selection process
- Complete contract changes with Kiewit-General

Public Information

- Hold community presentations as requested
- Complete three-day closure summary report
- Begin work with PRTPO for eight-week closure mitigation plan
- Produce project budget summary report
- Complete 2006 communication plan



This report highlights updated information regarding the Hood Canal Bridge Project work July–September 2005. Additional information may be obtained from WSDOT's Olympic Region Communications Office at (360) 357-2789.

For more information about the Hood Canal Bridge Project, visit the HCB web site:
www.hoodcanalbridge.com.

For more information, contact:

Lloyd D. Brown, Media Relations
(360) 357-2789 • brownl@wsdot.wa.gov

Eric Soderquist, Project Director
(360) 704-6305 • soderqe@wsdot.wa.gov

Becky Hixson, Community Outreach
(360) 704-6308 • hixsonb@wsdot.wa.gov



Washington State
Department of Transportation

Going Forward Budget Folio

October 2005

Hood Canal Bridge Retrofit and East-half Replacement Project

The Hood Canal Bridge is an economic lifeline for the people and businesses of the Olympic Peninsula and a gateway for visitors coming to experience the wonders of the region.

Going Forward

The SR 104 Hood Canal Bridge's extreme makeover is moving forward to complete the next major milestone – replacing the east half. Every section of the bridge, from the east end to the west, will be improved, upgraded or replaced when the project is complete. To date, WSDOT installed new approach spans and has nearly completed the west half widening work.

New Direction

Through most of 2005, the Hood Canal Bridge Team pursued new sites for pontoon and anchor construction and engaged in contract renegotiations with Kiewit-General (K-G) (see sidebar). Timely project delivery is among WSDOT's highest priorities. The department recognizes that completing this project as soon as possible is critical to spending money wisely. Labor, materials and maintenance costs continue to increase. Those additional costs must be incorporated into the budget.

Budget History: June 2003 to February 2005

When the Hood Canal Bridge contract was awarded in June 2003, the project budget, which included the cost of building pontoons and anchors at the graving dock in Port Angeles, was \$275 million. Since that time, budget adjustments were made as new needs arose – anchor cable replacement; inflation in cost of goods and services; and, archaeological efforts (see Budget History on page 2). Including these additional work items, the February 2005 project budget was \$292 million.

June 2003	\$275,082,000
Budget adjusted to contract award amount.	
May 2004	\$284,214,000
Budget increased to include archaeological work at Port Angeles, acquisition of additional property and purchase of additional materials.	
Nov. 2004	\$285,234,000
Budget increased due to additional archaeological work and added lease costs.	
Feb. 2005	\$291,540,000
Budget increased to immediately replace east-half anchor cables.	

Staying with the Current Contractor

In January 2005, WSDOT assembled an expert review panel to evaluate the project and advise the SR 104 Hood Canal Bridge project team on the course of action for contracting the work. The panel included national experts in construction, program management, contract administration and marine construction.

Recommendations from the expert review panel echoed the sentiments of WSDOT executives: the Hood Canal Bridge Team must identify a course of action to replace the aging east half of the Hood Canal Bridge, at a predictable cost, as soon as possible. The panel also recommended moving quickly ahead with the current contractor, Kiewit-General. The project team worked with the contractor to find new sites for constructing, assembling and outfitting pontoons. Once locations were selected, work turned to negotiating contract changes with an eye toward minimizing expenses and time associated with re-packaging contract documents; ensuring the best use of material already acquired for the project; and, avoiding any further financial loss to sub-contractors and suppliers ready to deliver the work.

In July 2005, soon after resolving past cost issues, WSDOT and K-G began negotiating the cost of completing the project. WSDOT and K-G executives reached agreement on a Target Price for the remaining project work in September 2005. A change order detailing the upcoming construction work was signed in October. The Hood Canal Bridge Team is now updating and finalizing the budget based on the actual construction contract.

Budget History: February 2005 to October 2005

The October 2005 estimate to complete the project is \$179 million more than the February 2005 budget. Moving to different locations changes the costs associated with completing the job. Existing facilities around the Puget Sound offer the best production schedule and a lower cost than building a new graving dock, but necessitate budget increases. Expenses include costs associated with stopping the work, re-pricing the contract to use other facilities, parts storage and escalation of costs for labor, equipment and materials. Additional cost increases may come from a variety of risks inherent to the project: Port Angeles site closure, future judgments, continued oversight of Port Angeles facility, excessive material cost escalation and bridge maintenance needs. The full extent of the additional costs could not be quantified until negotiations with K-G were completed. To ensure enough funding for project completion and cover anticipated cost increases, \$162 million was included in the 2005 Transportation Partnership Account. In May 2005, the project budget was \$454 million.

Since WSDOT and K-G agreed to a contract change order in October, WSDOT can now answer the most pressing questions concerning project cost. The overall project budget is now estimated to be \$471 million, however, the new contract provides a shared savings element that encourages the contractor to seek efficiencies and reduce costs (see sidebar on page 3). The change order costs are \$17 million higher than the 2005 Transportation budget, and that amount is being incorporated in the WSDOT budget proposal for the 2006 legislative session.

The change in budget is categorized into five major cost areas: past and current construction; WSDOT construction management; closure mitigation; new facilities and bridge completion; and, mechanical and electrical retrofitting.

1) Past and Current Construction

This cost area includes Port Angeles work (see pie chart), completed work – west-half widening and approach span replacement, anchor cable replacement, and work in progress.

Port Angeles.

Expenses include construction costs, settlements, engineering and design, landscaping, materials, land acquisition and leases, anchor cable replacement, archaeological work, and WSDOT contract management.

Bridge Site Work.

The new east and west approach spans were rolled into place in August. In addition, widening on both the south side the north side of the west half is almost finished.

Work In Progress.

Work continues on archaeology, new designs for pontoon and anchor construction, material inventory, closure mitigation design work, and Port Angeles cost analysis. WSDOT is auditing the contractor's work and anticipates adjustments.

2) Going Forward WSDOT Construction Management

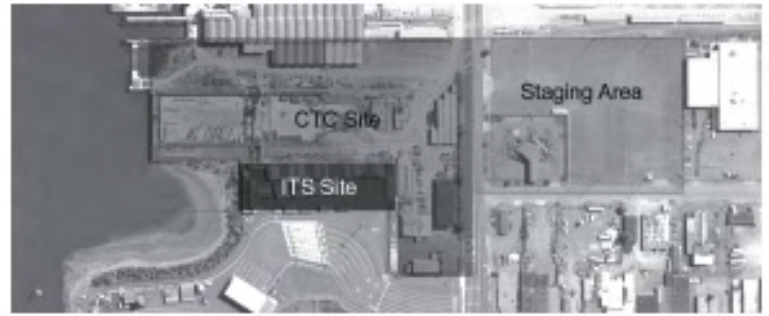
Cost increases resulted from additional WSDOT staff hours during contract renegotiations, additional time needed to coordinate and supervise construction at multiple sites over the lifetime of the project and the need to employ staff over a longer period of time.

Hood Canal Bridge Project: Change in Budget

	February 2005 Budget	October 2005 Budget	Budget Change
1) Past & Current Construction			
Port Angeles	58,500,000	86,823,000	28,323,000
Bridge Site Work	42,350,000	45,310,000	2,960,000
Work In Progress			
Remaining Archaeology Work	—	2,150,000	2,150,000
Project Design & Engineering	7,800,000	8,850,000	1,050,000
Major Materials for Future Work	41,200,000	61,440,000	20,240,000
Bridge Site Construction Management	19,930,000	9,450,000	(10,480,000)
Anticipated Adjustments	—	(10,950,000)	(10,950,000)
Mitigation Design & Property Acquisition	2,990,000	2,990,000	—
<i>Subtotal of Past & Current Construction</i>	<i>172,770,000</i>	<i>206,063,000</i>	<i>33,293,000</i>
2) Going Forward WSDOT Construction Management			
Contract Management	—	27,486,000	27,486,000
Project Design and Engineering	—	4,550,000	4,550,000
<i>Subtotal of WSDOT Construction Management</i>	<i>—</i>	<i>32,036,000</i>	<i>32,036,000</i>
3) Bridge Closure Mitigation			
<i>Subtotal Bridge Closure Mitigation</i>	<i>8,760,000</i>	<i>9,644,000</i>	<i>884,000</i>
4) New Facilities & Bridge Completion			
Pontoon Construction	49,800,000	109,100,000	59,300,000
Pontoon Outfitting & Testing	14,700,000	48,500,000	33,800,000
Pontoon Float In	21,000,000	23,000,000	2,000,000
Anchor Construction & Installation	15,000,000	39,900,000	24,900,000
Construction Contingencies	6,460,000	—	(6,460,000)
<i>Subtotal New Facilities & Bridge Completion</i>	<i>106,960,000</i>	<i>220,500,000</i>	<i>113,540,000</i>
5) Mechanical & Electrical Retrofitting			
<i>Subtotal of Mechanical & Electrical Retrofitting</i>	<i>3,050,000</i>	<i>2,725,000</i>	<i>(325,000)</i>
TOTAL PROJECT	\$291,540,000	\$470,968,000	\$179,428,000



Pontoon and anchor construction site, Port Angeles



Concrete Technologies in Tacoma. One of the future construction sites.

3) Bridge Closure Mitigation

Getting ready for the May-June 2009 Hood Canal Bridge closures requires extensive planning, preparation and effort. Starting in 2006, WSDOT will focus on mitigation planning. In 2008, outreach efforts will begin to provide advance notification, help drivers find alternate travel options, efficiently put the mitigation plan in place and find effective ways to quickly update drivers when the bridge opens.

4) New Facilities and Bridge Completion

This cost area includes the costs of pontoon construction, outfitting and testing, float-in, and anchor construction and installation. The current construction schedule includes a January 2006 notice to proceed, 2009 float-in, and final elements completed by 2010. Budget and timeline opportunities and challenges exist due to moving construction operations from Port Angeles to existing Puget Sound facilities (see Where to Build on page 4).

Pontoon Construction, Outfitting and Testing, Float-in. Assurance of cost and schedule is one of the most important benefits of using existing facilities. Other opportunities are evident in the areas of availability of skilled labor, reduced environmental risks, material transportation costs, efficiencies gained from using established waterfront facilities specializing in marine construction and better availability for other resources.

The useable construction area at existing facilities presents challenges – it is approximately five times smaller than the proposed Port Angeles graving dock. Work process inefficiencies include additional cycles of pontoon construction and float-out from the graving dock; decreased return of investment due to modifying and leasing existing facilities; production rate impacts due to site layout; and, additional time needed to coordinate multiple sites.

Anchor Construction and Installation. Delays increased costs in materials and labor. In addition, work process inefficiencies will result from building anchors in a smaller area than that available in Port Angeles. Once the final anchor construction location is determined, the costs will be finalized. The current construction schedule places anchor construction in 2007 and installation in 2008.

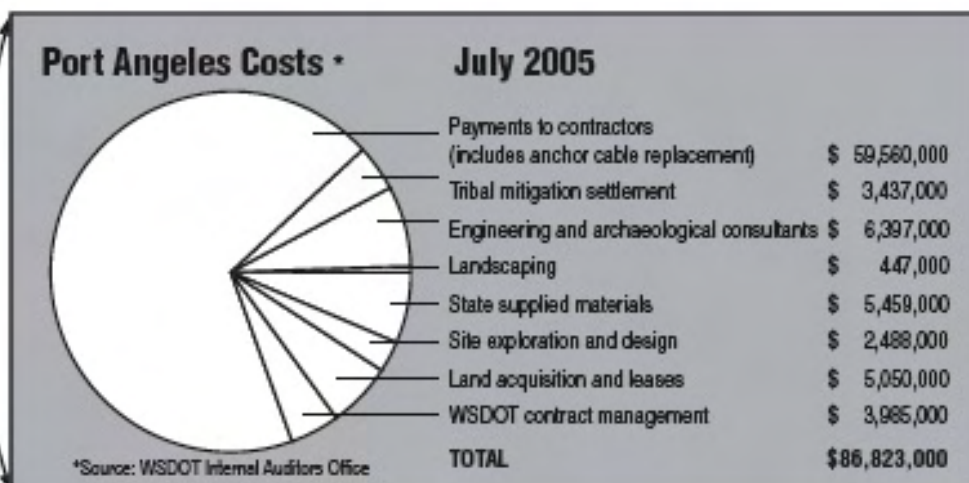
5) Mechanical and Electrical Retrofitting

Costs for storage, warranties of parts, labor, construction materials and maintenance changed when construction timelines were extended.

A New Contract Pricing Strategy

When renegotiations began, WSDOT and Kiewit-General executives agreed to explore a new contract pricing method—Target Pricing. Project schedules were reworked and a new budget developed for building the pontoons and anchors for the project that capitalized on K-G's experience building floating bridges in Washington State; took full advantage of the experience the contractor already has gained in planning the work; and, made the most efficient use of parts and materials that have already been manufactured and purchased for the project. In April 2005, it was agreed that WSDOT and K-G would use a Target Price contracting method.

Target Pricing means that WSDOT and K-G share the responsibility for working through high-risk components of the work, working together to find cost effective solutions during construction and looking for efficiencies to ensure on-time delivery. The new price includes the target cost, fee, and shared savings to reward good performance.



This report highlights updated information regarding the Hood Canal Bridge Project. Additional information may be obtained on the Hood Canal Bridge Project web site at:

www.hoodcanalbridge.com

Eric Soderquist

Project Director

(360) 704-6305 soderqe@wsdot.wa.gov

Becky Hixson

Communication Manager

(360) 704-6308 hixsonb@wsdot.wa.gov

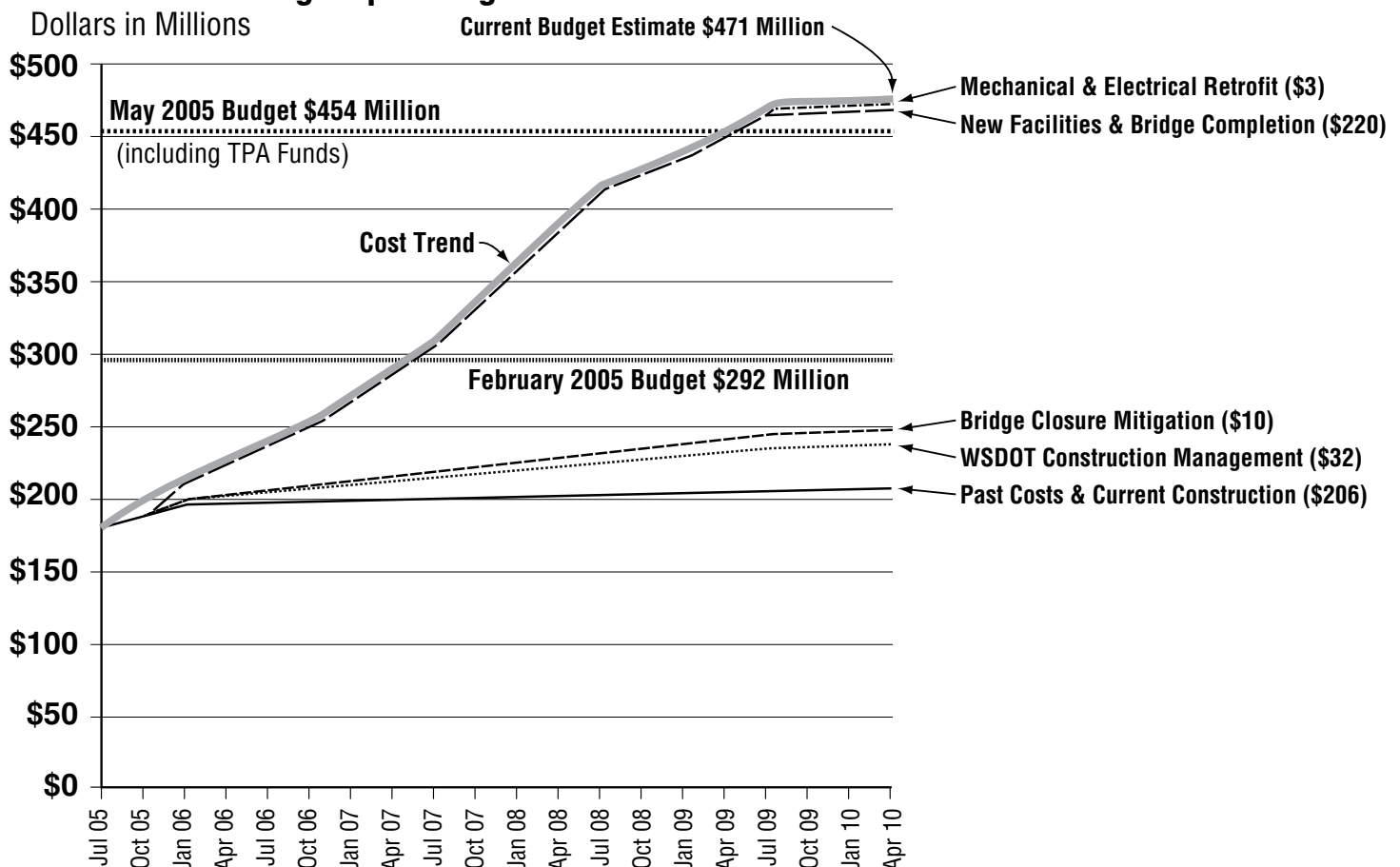
Where to build

In the long-term it would be most cost effective for the state to own and operate a large graving dock facility to mass-produce pontoons and anchors for the four floating bridges in WSDOT's inventory. The main reason for building the graving dock in Port Angeles was to create a state-owned facility ideally suited for years of floating bridge construction for both Hood Canal Bridge and the SR 520 Evergreen Point Floating Bridge. When construction on the Port Angeles graving dock stopped in December 2004, there was a sense of urgency to find a site to build the Hood Canal Bridge pontoons. WSDOT executives decided that finding the fastest, most predictable methods for completing work needed to take priority over providing a new graving dock suitable for multiple bridge projects. In early 2005, WSDOT conducted a review of possible pontoon construction sites around Puget Sound and chose to pursue the remaining work in existing, privately owned facilities.

Using existing commercially operated facilities for pontoon construction will deliver a new east half in 2009 without the risks associated with permitting and constructing a new graving dock facility, but WSDOT will pay millions in lease costs instead of making an investment in a state-owned graving dock.

Kiewit-General has worked side-by-side with WSDOT since March 2005 to develop a creative plan for using existing facilities to construct, assemble and outfit pontoons for the project. A commercial graving dock in Tacoma will be used to construct pontoons in four cycles. The massive draw-section of the bridge will be assembled at a shipyard in Seattle. Commercial piers around the sound will be used to the elevated roadway sections on the pontoons.

Hood Canal Bridge Spending Forecast





Monthly Report

November 2005



Hood Canal Bridge Retrofit and East Half Replacement Project

East-half Replacement Completion Goal: 2009
West-half Retrofit Completion: 2010

Project Delivery

This month's construction brought the Hood Canal Bridge Project canal site portion of the work closer to completion.

West Side Widening = 98% complete

Travelers crossing the bridge in November had more room to maneuver. Lane restrictions were lifted when the contractor, Kiewit-General of Poulsbo, removed the old barrier gate and completed roadway striping. Lane widths increased from 11 feet to 12 feet. West-half roadway shoulders are now 8 feet, providing room for disabled vehicles to pull off the roadway and to allow traffic to move smoothly around them. Crews also placed compression seals and half of the permanent signs.



The remaining work includes finishing the compression seals (seals between sections of roadway concrete), installing signs and completing concrete cleanup work. *West Side Widening Projected Completion Date: February 2006*

West Approach = 97% complete

Crews removed north work trestle sections in November. The remaining work includes a small amount of paving, installing curbs, putting in barrier and guardrail, finishing storm gate installation, completing signing, removing the remainder of the trestles and demolishing old Pier 2. *West Approach Projected Completion Date: February 2006*

East Approach = 98% complete

Old piers 7 and 8 were demolished, a gantry (framework used during pier removal) fabricated and a portion of the concrete cleanup work completed.

During the next few months, crews will continue with old pier demolition, concrete finish work, sign placement, paving cleanup, beacons, signs and curb installation, electrical work and installation of protecting structures around Pier 4. *East Approach Projected Completion Date: February 2006*

November 2005

Accountability

Fulfilling Expectations

In January 2005, WSDOT assembled an expert review panel to evaluate the project and advise the SR 104 Hood Canal Bridge project team on the course of action for contracting the work. The panel included national experts in bridge construction, program management, contract administration and marine construction.

The two main recommendations from the expert review panel were:

1. Identify a course of action to replace the aging east half of the Hood Canal Bridge, at a predictable cost, as soon as possible.
2. Move quickly ahead with the current contractor, Kiewit-General.

Almost a year's worth of work came together during November as the Hood Canal Bridge team neared completion on these recommendations.

Course Of Action

Construction for the Hood Canal Bridge replacement project will now take place at commercial sites around Puget Sound. Pontoons will be constructed at Concrete Technology in Tacoma. The Concrete Tech pontoon construction plan will also involve mooring pontoons in the Port of Seattle prior to outfitting them at Todd Shipyards and other commercial sites in Seattle. Pontoons will then be towed to the bridge site in 2009.

The Tacoma site, owned by Concrete Tech Corporation and submitted by Floating Concrete Bridges (FCB) Facility group, a Puget Sound shipyard coalition that includes Seattle's Todd Shipyards and the Duwamish Shipyards, was one of three properties identified by WSDOT in March 2005 as the most feasible pontoon construction sites. The Concrete Tech fabrication site was selected after extensive

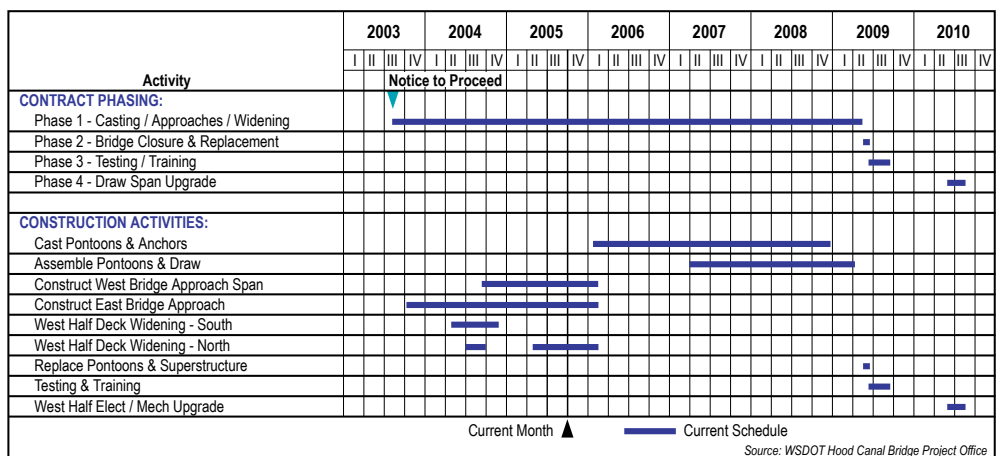


Concrete Technologies in Tacoma, WA. Site of pontoon construction.

consultations between WSDOT, the contractor and FCB group. Using these facilities allows the project to better predict costs and project timeline without the risks associated with building a new graving dock.

Eventually, 14 pontoons will be built at Concrete Tech. Another three pontoons, built during the west-half bridge replacement in the early 1980s, will be retrofitted in Seattle. The completed east-half pontoon roadway sections and fully assembled east-half draw span will be floated into place during the bridge closure in May and June 2009.

Schedule Update



Moving Ahead With The Contractor

The project team worked with Kiewit-General (K-G) to find new sites for constructing, assembling and outfitting pontoons. Once locations were selected, work turned to negotiating contract changes with an eye toward minimizing expenses and time associated with re-packaging contract documents; ensuring the best use of material already acquired for the project; and, avoiding any further financial loss to sub-contractors and suppliers ready to deliver the work.

In July 2005, soon after resolving past cost issues, WSDOT and K-G began negotiating the cost of completing the project. WSDOT and K-G executives reached agreement on a target price for the remaining project work in September 2005. A change order detailing the upcoming construction work was signed in October.

The Hood Canal Bridge team is currently updating the budget based on the actual construction contract implementation of the new target pricing method for contracting work between WSDOT and the contractor, K-G.

The target price contract was written in a way that provides several ways to review all project expenditures. The contractor will provide WSDOT with invoices based on actual costs required to do the work. WSDOT has the opportunity to review those costs themselves to make sure they meet the specific criteria for allowable direct project costs or have an independent auditor review the contractor's cost system.

Target Pricing

Target Cost	Fee	Shared Savings		
Materials (concrete, lumber, machinery, etc.) Labor Management Office space Utilities	Contractor's negotiated profit Contractor's corporate overhead	Savings	WSDOT	K-G
		Up to \$5 million	.60 cents per \$1 savings	.40 cents per \$1 savings
		\$5–10 million	.80 cents per \$1 savings	.20 cents per \$1 savings
		Over \$10 million	\$1 per \$1 savings	n/a

What is Target Pricing?

Three components make up a **target price** contract: target cost, fee and shared savings.

Target cost consists of costs to build the project, such as concrete, lumber, machinery, labor costs, management costs, office space and utility services. The target cost for this project was established jointly by WSDOT and K-G. This number represents what both parties believe will be the project costs. Target cost takes into account things that could affect the project budget such as inflation, delays to production rates and material availability.

The contractor's fee includes a negotiated profit on the project and an audited amount for corporate overhead.

The third component is a provision to realize shared savings if the final project cost is below the target cost. WSDOT and K-G must work together to find cost-effective solutions during construction and to look for money saving efficiencies.

Next Month...

Performance Measures

Find out how the Hood Canal Bridge project will measure the performance of each project area (construction, communications, design, business and environmental) and what information it will gather to report on the project's scope, schedule, budget, quality of work and community impact.

November 2005

Communication

Hood Canal Bridge Project Team

The ultimate goal of the Hood Canal Bridge team is to administer a world-class project to replace the Hood Canal Bridge. Meet one of the people who make it all happen.



Jon Danks, Business Manager, Hood Canal Bridge Team

When Jon began working on the Hood Canal Bridge project in 2003, he brought more than 30 years of construction and engineering expertise to the project.

Jon's attention to detail and inquisitive mind help him successfully track the mega-project budget and schedule. From working in both Alaska and Washington, Jon also has a good understanding of one of the biggest challenges that faces northwest construction projects: building and maintaining projects in rainy weather conditions.

Jon's years of experience in change management will contribute to the overall success of the project as it moves from focusing efforts on bridge site work to moving forward with pontoon construction.

Even with his dry sense of humor, rain doesn't stop Jon from doing his job at work or sharing his time with others. Jon has volunteered in various positions for youth ice hockey teams and organizations for 25 years.

He also spends time with his wife, Lynn, of 32 years, golfing, traveling and fishing – as long as he isn't in the same place at the same time with a bear. Growing up in Minnesota and Alaska gave him a few close-up views of these awesome creatures and he doesn't care to repeat those encounters.

Jon enjoys playing cards, watching movies and spending time with his family. His 31-year-old son, Jon Jr., is married and lives in Bend, Ore. Jon's daughter, Lisa, 27 lives with her 2-year-old daughter, Alexis, in Bothell. (And yes, his granddaughter has Jon wrapped around her finger). His third child, Chris, is 22 and lives in Woodinville.

Project Responsibilities: Overall project budgets, costs, project controls, payments, change management, scheduling, documentation systems, performance measures and expert advice to project management and staff. Questions? danksj@wsdot.wa.gov or (360) 704-6302



This report highlights Hood Canal Bridge Project information from **November 1-30, 2005.**

For more information about the Hood Canal Bridge Project visit the project web site, www.hoodcanalbridge.com, or contact project staff:

Becky Hixson, Communication Manager,
(360) 704-6308, hixsonb@wsdot.wa.gov

Eric Soderquist, Project Director,
(360) 704-6305, soderqe@wsdot.wa.gov

Hood Canal Bridge Retrofit and East-half Replacement Project

East-half Replacement Completion

Goal: 2009

West-half Retrofit Completion: 2010

Q. Where is the bridge?

A. The Hood Canal Bridge is located between Kitsap and Jefferson counties at the northern mouth of the Hood Canal.

Q. Why is it important?

A. It serves as a vital economic and social link between the greater Puget Sound and the Olympic Peninsula.

Q. What is WSDOT doing?

A. The Washington State Department of Transportation is improving this lifeline by replacing the east-half floating portion of the bridge, replacing the east and west approach spans, replacing the east and west transition truss spans and updating the west-half electrical system. The project completion estimate is 2010.

Q. What can drivers do to stay informed?

A. Sign up to receive the latest news regarding the Hood Canal Bridge Project and other related area transportation news right in your email inbox. Visit www.hoodcanalbridge.com to subscribe.



Fourth Quarter Report

October–December 2005



Hood Canal Bridge Retrofit and East Half Replacement Project

EAST-HALF REPLACEMENT COMPLETION GOAL: 2009
WEST-HALF RETROFIT COMPLETION: 2010

Crews construct tower crane rail forms in preparation for pouring concrete, Dec. 29, 2005.

MOVING FORWARD

Site preparation efforts at Concrete Tech in Tacoma marked the start of pontoon construction on Hood Canal Bridge replacement project at commercial sites around Puget Sound. Other highlights from this quarter were:

Construction Progress

This quarter's construction brought the State Route 104 Hood Canal Bridge Project canal site portion of the work closer to completion.

Public Outreach and Partnerships

The Hood Canal Bridge Communication Team won "Best In-House Campaign Award" in the 2005 Magellan awards communications campaign competition for the Hood Canal Bridge August 2005 Closure Outreach.

Extensive plans were developed to guide community relations, business relations, media relations, web site development,

project reporting and governmental relations during 2006.

Safety Update

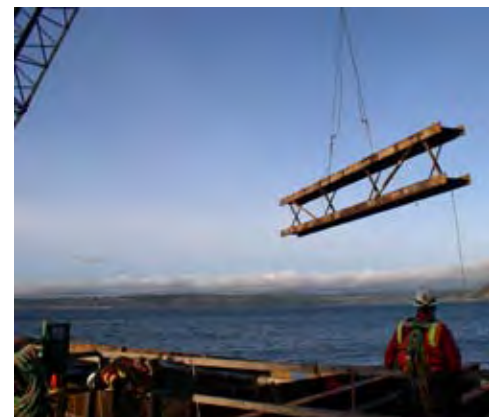
Safety remained paramount for both WSDOT staff and Kiewit-General (K-G). No recordable injuries were reported and there were no lost workdays or restricted days.

Financial Report

The overall project budget is estimated to be \$471 million, however, the new contract provides a shared savings element that encourages the contractor to seek efficiencies and reduce costs. As of December 31, 2005, \$189 million had been spent.

Environmental Stewardship

Environmental stewardship remained a focus during project construction. Permit requirements were met at the bridge. WSDOT continued to monitor environmental impacts associated with the project.



For more detailed information:

Construction Progress	Page 2
Public Outreach and Partnerships.....	5
Safety Update.....	6
Financial Report	7
Environmental Stewardship.....	8

CONSTRUCTION PROGRESS

WSDOT staff and K-G concentrated on wrapping up the final work at the bridge site during the fourth quarter and on preparing the existing graving dock site in the Tacoma area for pontoon construction.

Project Site Completion Status

Percent Completed as of 12-31-05

East Approach	98%
West Approach	99%
West-half Roadway Widening	98%
Transition Spans and Trusses	50%
Pontoon Construction Site Preparation	15%

Source: WSDOT Hood Canal Bridge Project Office

BRIDGE SITE

Weather conditions have been challenging but crews were still able to complete a substantial amount of work at the bridge site.



Crane removes north work trestle sections and places them on a barge for removal from the bridge site, Dec. 29, 2005.



Excavator demolishes old pier sections at Hood Canal Bridge site, Dec. 16, 2005.

WEST APPROACH SPAN

Crews removed north work trestle sections, completed building the embankment near Pier 1, installed drainage systems, placed permanent striping on the roadway, set traffic barrier, removed the temporary south work trestle and put the storm gates in place.



Worker cuts and removes shaft casing from around an old pier, Dec. 5, 2005.



Travelers crossing the Hood Canal Bridge have more room to maneuver, Dec. 29, 2005.



Crews remove wood flooring from a temporary work trestle, Dec. 16, 2005.

EAST APPROACH SPAN

Crews completed a substantial amount of work between Oct. – Dec. including: old piers 7 and 8 were demolished; a gantry (framework used during pier removal) fabricated; a portion of the concrete cleanup work completed; the embankment near Pier 10 built; drainage systems installed; two precast approach slabs set; final grading, paving, striping and barrier installation for the new east approach roadway completed; electrical work needed to activate storm gates and advanced warning signs completed; and, storm gates placed. In addition, the old approach span removal continued and south work trestle removed started.

WSDOT and K-G are evaluating leaving the north work trestle in place to facilitate work during the east-half bridge replacement.

WEST-HALF ROADWAY WIDENING (north side):

WSDOT lifted lane restrictions November 23, 2005 on the Hood Canal Bridge when the contractor, K-G, removed the old barrier gate and completed roadway striping. Lane widths increased from 11 feet to 12 feet. West-half roadway shoulders are now 8 feet, providing room for disabled vehicles to pull off the road and to allow traffic to move smoothly around them.

Additional west-half roadway widening work included installing railing, placing compression seals, placing new traffic, barrier gates, and permanent signs and completing concrete finishing work.

STEEL TRANSITION SPANS AND TRUSSES (east and west)

Work is now focused on assembling all the parts that make up the transition spans and trusses. During this quarter, all the pipe materials needed have been purchased and delivered to Universal Structural, Inc. in Vancouver, WA. The steel girders for the truss sections have been fabricated. In addition, the floor beam sections have been fabricated and are being prepared for assembly.

EAST-HALF BRIDGE REPLACEMENT

K-G staff began the site preparation work required at Concrete Technology in Tacoma needed to accommodate pontoon construction. Completed work included:

- Shoreline and building permit secured.
- Existing crane footing was demolished and crane rail removal on north side of graving dock.
- Excavation for sheet pile work completed on north side of graving dock.
- Access for pile driving equipment installed and pile driving equipment delivered to begin driving sheet pile.
- Fenced materials staging area north of graving dock.



Concrete Tech staff removes equipment and materials from the graving dock in preparation for pontoon construction, Dec. 5, 2005



Carpenters lay out lumber in preparation for form assembly, Dec. 29, 2005.

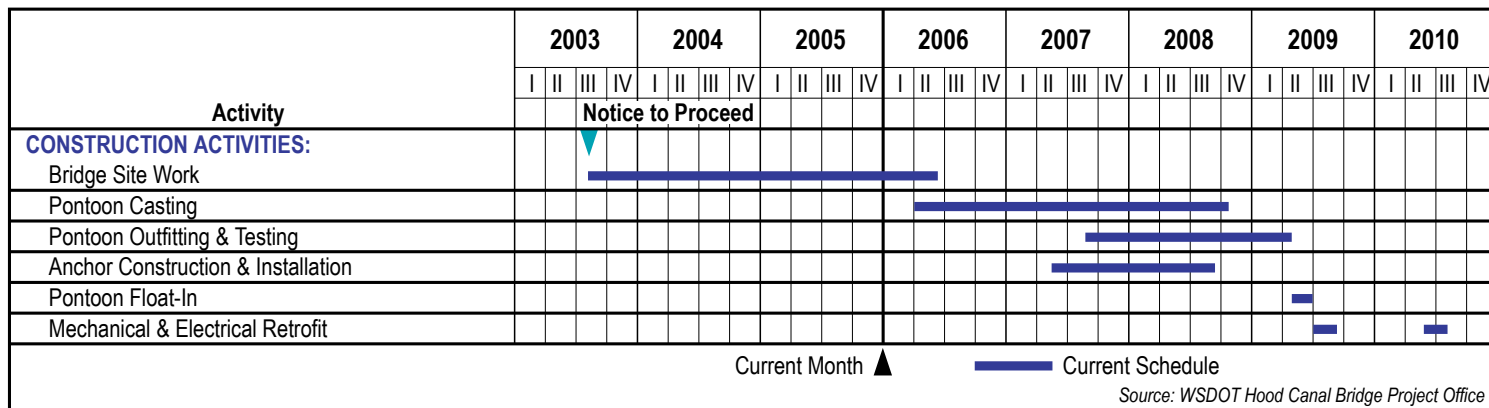


Supplies arrive from Port Angeles. These unused tiebacks will be used to secure sheet pile walls at Concrete Tech, Dec. 20, 2005.



Crews install unused sheet pile walls from Port Angeles on the north side of the Concrete Tech graving dock, Dec. 29, 2005.

SCHEDULE UPDATE



PUBLIC OUTREACH, PARTNERSHIPS AND CLOSURE PLANNING

WSDOT won "Best In-House Campaign Award" in the international 2005 Magellan awards communications campaign competition for the Hood Canal Bridge August 2005 Closure Outreach. The campaign material received the highest total score within its competition class and was presented with the Platinum Award.

The Hood Canal Bridge August 2005 Closure Outreach campaign ranked 5th out of the top 50 publicity campaigns of 2005. The top 50 awards are given to the highest-scoring entries regardless of competition class. The campaign received 94 out of 100 points, placing it in among the very best judged.

More than this award, the WSDOT values the community relationships built before and during the closures.

"We know the August 2005 closure went so smoothly because of the Peninsula community. They found ways to inform others about the closures, form partnerships and provide alternate travel options for those who rely on the bridge for their livelihood," said Eric Soderquist, Hood Canal Bridge Project Director. "We will continue to

maintain and build more of these important partnerships to help the community prepare for the closures in 2009."

The Best In-House Campaign category required that in-house staff do more than 50 percent of the work.



Other winners in this category included national and international companies such as Federal Motor Carrier Safety Administration, Boost Mobile, a wholly owned subsidiary of Nextel Corporation and Veolia Environnement.

The 2005 Magellan Awards Communications Campaign Competition, sponsored by the League of American Communications Professionals, drew an unprecedented number of submissions representing a broad range of industries and organizational sizes. More than 475 entries were received from the world's top companies, such as The PGA of America, ESPN, American Airlines, Wells Fargo and Verizon Wireless, so competition was exceptionally tough. For more information, visit www.lacp.com.

2006 Communication Plan

Extensive plans have been developed to enhance our outreach work including a guide community relations, business relations, media relations, web site development, project reporting and governmental relations during 2006. Elements of this year's plan include:

- New pages on the website, www.hoodcanalbridge.com, including project progress photos
- Updated materials available for community presentations
- Open houses to help familiarize the community with the 2009 closure mitigation plan
- Monthly project progress reports which highlight the project's performance

Communicating the Hood Canal Bridge Project's Performance

The Hood Canal Bridge team will be reporting on the performance measures for the Hood Canal Bridge project every month.

The Hood Canal Bridge Team is striving to:

- *Deliver the capital improvement program as instructed by the Legislature*
- *Maintain and operate the Hood Canal Bridge cost effectively and safely*
- *Report achievements, shortcomings, and challenges in performance*

Consistent with these priorities, the Hood Canal Bridge project team is currently defining specific performance measures for the project, centered around:

- *Project schedule*
- *Financial performance*
- *Safety*
- *Quality*
- *Traffic impacts to the community*

Performance measures will be based upon data that can be collected quickly and accurately, be independently verified, comply with industry-recognized quality standards and align with WSDOT's strategic initiatives from the "2003 - 2007 WSDOT Business Directions" and the quarterly "Measures, Markers and Milestones Grey Book". The project team will track performance on an ongoing basis, identifying trends and their underlying causes, and making improvements where necessary to achieve desired performance.

SAFETY UPDATE

Safety remained paramount for both WSDOT staff and K-G. No lost workdays or restricted days were reported this quarter.

PERSONNEL SUMMARY

October - December 2005

	Hours Worked	Recordable Cases	LWD Cases	Lost Workdays	Restricted Cases	Restricted Days	Fatalities
K-G	27,305	1	0	0	0	0	0
WSDOT	13,682	0	0	0	0	0	0
Total	40,987	0	0	0	0	0	0

No recordable injured were attributed to WSDOT or K-G this quarter.

Project To Date

	Hours Worked	Recordable Cases	LWD Cases	Lost Workdays	Restricted Cases	Restricted Days	Fatalities
K-G	390,008	3	0	0	0	0	0
WSDOT	129,181	2	0	0	0	0	0
Total	519,189	5	0	0	0	0	0

The previous injuries attributed to WSDOT during the life of the project included:

- Employee attempted to open a hatch with T-handle wrench, could not get it open and injured their hand by striking it with the wrench. The employee was treated with first aid and had no lost time or workdays. Employee was instructed on the proper equipment to use for this activity in order to work safely.
- While cutting brush with a machete, the individual cut himself with the machete and was treated with first aid; no time lost.

The two recordable cases of injury attributed to K-G are a hairline fracture of the wrist while operating a wrench and a hobo spider bite that became infected. Lost time information was not available for these two recordable cases.

VEHICLE SUMMARY

WSDOT Hood Canal Bridge Project Office Vehicles

	Recordable Cases	LWD Cases	Lost Workdays	Restricted Cases	Restricted Days	Fatalities
2005 Y-T-D	0	0	0	0	0	0
Project To-Date	3	0	0	0	0	0

No recordable vehicle accidents were attributed to WSDOT or K-G for this quarter.

Project To Date

The three recordable vehicle accidents were:

- In icy conditions, vehicle slid across oncoming traffic, ended up in ditch. No injuries.
- Vehicle was parked next to dump truck on site. The vehicle's door was open as the dump truck took off. Vehicle's door was ripped off. No injuries.
- Vehicle was stopped at a stoplight behind a semi trailer. Vehicle in next lane rolled forward and hit the front of the truck. No injuries.

FINANCIAL REPORT

Project Cost Summary

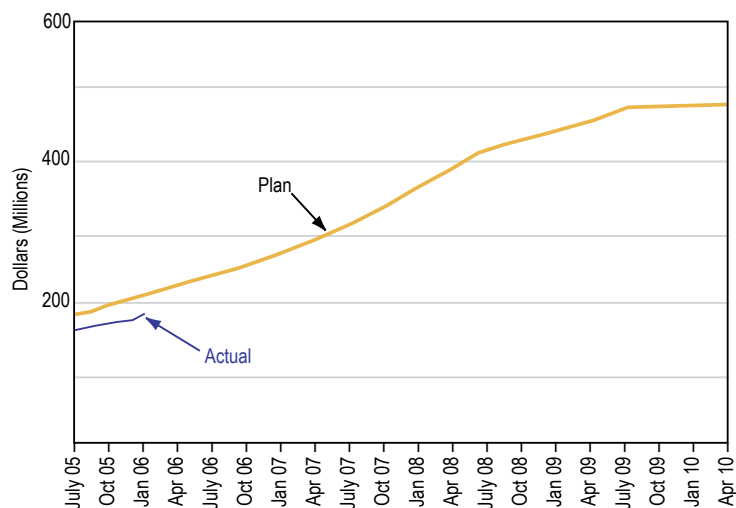
Expenditures as of December 31, 2005 (in millions)

Project Cost Summary	Budgeted	Expended
Past and Current Construction Costs	\$ 206.1	\$ 188.5
Going Forward WSDOT		
Construction Management	\$ 32.0	\$ 0.7
Bridge Closure Mitigation	\$ 9.6	\$ 0.0
New Facilities and Bridge Completion	\$ 220.5	\$ 0.0
Mechanical and Electrical Retrofitting	\$ 2.7	\$ 0.0
Total	\$ 470.9	\$ 189.2

Source: WSDOT Hood Canal Bridge Project Office

Planned vs. Actual Expenditures

(Total Project Cost)



Source: WSDOT Hood Canal Bridge Project Office

Construction Costs

Since WSDOT and K-G agreed to a contract change order in October, WSDOT can now answer the most pressing questions concerning project cost. The overall project budget is now estimated to be \$471 million, however, the new contract provides a shared savings element that encourages the contractor to seek efficiencies and reduce costs. The change order costs are \$17 million higher than the 2005 Transportation budget, and that amount is being incorporated in the WSDOT budget proposal for the 2006 legislative session.

The change in budget is categorized into five major cost areas: past and current construction; going forward WSDOT construction management; closure mitigation; new facilities and bridge completion; and, mechanical and electrical retrofitting.

Outstanding Issues /

Potential Impacts to Cost:

- Site location selection for anchors

Hood Canal Bridge Project: Change in Budget

	February 2005 Budget	October 2005 Budget	Budget Change
Past and Current Construction Costs			
Port Angeles	58,500,000	86,823,000	28,323,000
Bridge Site Work	42,350,000	45,310,000	2,960,000
Work In Progress			
Remaining Archaeology Work	—	2,150,000	2,150,000
Project Design & Engineering	7,800,000	8,850,000	1,050,000
Major Materials for Future Work	41,200,000	61,440,000	20,240,000
Bridge Site Construction Management	19,930,000	9,450,000	(10,480,000)
Anticipated Adjustments	—	(10,950,000)	(10,950,000)
Mitigation Design and Property Acquisition	2,990,000	2,990,000	—
Going Forward WSDOT Construction Management			
Contract Management	—	27,486,000	27,486,000
Project Design and Engineering	—	4,550,000	4,550,000
Bridge Closure Mitigation			
Construction and Plan Implementation	8,760,000	9,644,000	884,000
New Facilities and Bridge Completion*			
Pontoon Construction	49,800,000	109,100,000	59,300,000
Pontoon Outfitting & Testing	14,700,000	48,500,000	33,800,000
Pontoon Float-In	21,000,000	23,000,000	2,000,000
Anchor Construction & Installation	15,000,000	39,900,000	24,900,000
Construction Contingencies	6,460,000	—	(6,460,000)
Mechanical & Electrical Retrofitting*	3,050,000	2,725,000	(325,000)
TOTAL PROJECT	\$ 291,540,000	\$ 470,968,000	\$ 179,428,000

* The budgets for each item within New Facilities and Bridge Completion and Mechanical & Electrical Retrofitting represent K-G's current estimated cost for this work, including sales tax.

ENVIRONMENTAL STEWARDSHIP

WSDOT continues to monitor environmental impacts associated with the Hood Canal Bridge Project.

- Battelle Environmental conducted quarterly eelgrass monitoring.
- Kiewit-General and WSDOT monitored pier demolition of the old approach span piers.

The Water Quality Monitoring Plan centers on protecting water quality and marine animals. WSDOT staff carefully tracked pH, turbidity and dissolved oxygen in the water any time there was construction work in the water. During pier demolition, data was collected at least once for each tide cycle (at least three times a day). Analyses of the data showed the extra preventative measures taken by WSDOT and K-G to protect water quality were very successful. There were no reportable violations during the entire quarter.

WSDOT biologists and inspectors carefully monitored the excavated area around each pier during demolition to make sure no marine animals became trapped. As a result of the monitoring, all marine mammals (small feeder fish, squid, shrimp, and crabs) that made their way into the area by the pier were carefully removed and placed in open water.

The pier demolition on the east side of the bridge has been completed and the contractor has begun to remove the southeast work trestle. This work operation along with removing the shaft casings is the last of the in-water work that will be done this year. Inspectors will continue to monitor the site and report on its condition.

- Kiewit-General began restoring the beach on the west side of the bridge.

K-G and WSDOT, in coordination with Washington State Fish and Wildlife, developed a plan that not only restores the beach on the west side, but utilizes recycled project materials in a way that will allow WSDOT to increase the size of the beach.

LOOKING AHEAD: JANUARY–MARCH 2006

Bridge Site

West-half roadway widening (north side):

Site work continues as K-G crews install guardrail, remove old approach span piers, complete electrical work, remove work trestles, install compressions seals, install signs and complete concrete cleanup work.

West-half approach span work:

The remaining work includes installing curbs, placing the barrier and guardrail, finishing storm gate installation, completing signing, removing the shaft casings at the bottom of old Piers 1,2 and 3, installing protecting structures around new Pier 3, and putting ladders on Pier 2.

East-half approach span work:

During the next few months, crews will continue with old pier demolition, concrete finish work, sign placement, paving cleanup, beacons, signs and curb installation, electrical work, installation of protecting structures around Pier 4, removal the shaft casings at the bottom of old Piers 4-9, phone line installation and storm gate finish work.

Pontoon Construction

Preparation work at Concrete Tech will be completed by the end of March. This includes the completion of sheet pile retaining walls to support two tower cranes. These cranes will run on rails along the north and south sides of the graving dock and move materials in and out of the graving dock.

Crews will construct a scale model of a pontoon, fabricate form panels, and start fabricating the rebar needed for first three pontoons to be built (Pa, Pb, and Q).

Public Information

The communication team will focus on preparing materials needed for 2009 closure mitigation plan community outreach during the first quarter of 2006.



This report highlights updated information regarding the Hood Canal Bridge Project work October–December 2005. Additional information may be obtained from WSDOT's Olympic Region Communications Office at (360) 357-2789.

For more information about the Hood Canal Bridge Project, visit the HCB web site:

www.hoodcanalbridge.com.

For more information, contact:

Becky Hixson, Communication Manager
(360) 704-6308 hixsonb@wsdot.wa.gov

Eric Soderquist, Project Director
(360) 704-6305 soderqe@wsdot.wa.gov